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CHARGES For Ginning Cotton

Seasons 1947-48 to 1954-55

UNITED STATES DEPARTMENT OF AGRICULTURE
Marketing Research Division and Cotton Division
Agricultural Marketing Service Washington, D.C.

Marketing Research Report No. 120 June 1956

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ACKNOWLEDGMENT

The cooperation of ginners throughout the Cotton Belt in making information available and the efforts of field personnel of the Cotton Division, AMS, in selecting gins and in collecting and reviewing the data are gratefully acknowledged. This is a cooperative study and joint report of the Marketing Research Division and Cotton Division, AMS. Beginning with the 1953-54 season, annual data have been published jointly by these two agencies. Prior to 1953-54, information was collected and reported by the Cotton Branch of the former Production and Marketing Administration.

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SUMMARY

Facilities for the ginning of cotton in the United States make up an important industry, and charges paid for ginning services are a big item of cost to cotton growers. Growers, on the average, paid more than 160 million dollars annually for ginning services during the period 1947-48 to 1954-55. Currently, the total investment in ginning facilities is in the neighborhood of 400 million dollars.

Charges for ginning usually are assessed by ginners according to one of four basic methods with separate charges in most instances for wrapping materials. During the seasons 1947-48 to 1954-55, charges for ginning approximately 72 percent of the crop were based on the hundredweight of seed cotton. About 19 percent of ginnings were charged for according to the hundredweight of lint. A flat charge per bale was levied on about 9 percent of ginnings, while charges based on toll per hundredweight of seed cotton (retention of a percentage of the seed cotton by ginners) represented less than 1 percent.

Belt-wide average charges for ginning and wrapping a 500-pound bale progressively increased from $9 per bale in 1947-48 to $12.83 per bale in 1954-55. In recent seasons, however, charges have tended to level off, or even decrease slightly, in some States. Region-wise, charges were lowest in the Southeast, where labor was less expensive, average investment in ginning facilities was lower, and practically all cotton was handpicked. Charges were highest in the Southwest because of factors almost opposite to those in the Southeast.

Since 1928, ginning charges for the most part have closely paralleled the wholesale price index of all commodities, which is recognized as a reliable indicator of price levels. Charges also have followed closely the parity prices of cotton, but have varied widely in relation to farm prices.

Methods of harvesting often account for variations in ginning charges. Proportion of the crop handpicked during the period 1947-48 to 1954-55 declined from 78 to 54 percent. Use of both mechanical pickers and strippers increased, while little change occurred from season to season in proportions harvested by handsnapping.

Since ginning charges most commonly are assessed on the basis of seed cotton weight, they are affected directly by the quantity of seed cotton needed to provide a bale of lint. The annual average weights of handpicked seed cotton required per 500-pound gross-weight bale varied from 1,305 pounds in 1947 to 1,392 pounds in 1954, and there were indications of a slight upward trend during the period. Average weights of handsnapped seed cotton ranged from 1,856 pounds to 2,015 pounds per standard-weight bale during the 8-year period. The annual average quantities of mechanically picked seed cotton needed per bale varied from 1,337 pounds in 1947-48 to 1,524 pounds in 1954-55, exceeding weights for handpicked cotton annually by about 95 pounds on the average. Weights for machine-stripped cotton exceeded those for handpicked cotton by from 750 to 1,000 pounds each season.

Nowadays, most gins must be equipped with extensive auxiliary equipment such as seed cotton driers, bur extractors, and various types of cleaners in order to perform satisfactory jobs of ginning. In recent seasons, many ginners have installed lint cleaners to help maintain cotton quality. Increased costs associated with installation and operation of such equipment frequently result in increased charges paid by growers for ginning services.

Very nearly one-third of the gins in operation in 1954-55 were equipped with lint cleaners. Indications are, however, that many ginners need further guidance as to how and when to use such equipment in the best interest of their customers. At those gins operating lint cleaners, 7 out of every 10 ginners ran every bale through these cleaners. Thus, many bales of high grade cotton (that grading Middling or better prior to lint cleaning) were lint-cleaned at a loss to the grower, since the value of weight losses in lint-cleaning such cotton generally exceeds returns from grade improvement.

The real cost to growers for ginning depends not only upon the charge paid but also upon the quality of the service received. In recent years a most gratifying development in this regard has been a substantial Belt-wide decrease in proportions of cotton reduced in grade because of below-normal ginning preparation. During the 14-year period 1933-46, proportions of rough-ginned cotton, by regions, ranged from approximately 11 percent in the Southeast to about 3 percent in the West. In the 8-year period 1947-54, about 4 percent of the crop in the Southeast and less than 1 percent of that in the West was roughly ginned. Ginning charges during both periods generally were lower in those regions where rough ginning was more frequent, but these lower charges presumably are offset somewhat by the poorer quality of service.

Charges for bale wrapping materials are an important item of cost to growers. From 1947-48 to 1954-55, growers paid $3.37 per bale, on the average, for bagging and ties--a total cash outlay of about 46 million dollars a season. In 1954-55, almost 60 percent of the crop was wrapped with open-weave jute bagging and most of the remainder was covered with sugar-bag cloth.

Nowadays, practically all cotton is moved to gins by motor vehicles. In 1954-55, only 3 percent of the crop was hauled by wagons and teams, as compared to 18 percent in 1947-48.

Ginners usually buy from one-fourth to one-third of the cotton ginned, on the average, and practically all cottonseed except that saved by growers for use on farms. Many ginners also conduct various other sideline activities on the gin yard, and policies regarding these activities often have a direct bearing on charges made for ginning services.

CHARGES FOR GINNING COTTON 1/
Seasons 1947-48 to 1954-55

By A. J. Fortenberry, agricultural economist,
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IMPORTANCE OF THE GINNING INDUSTRY

Cotton ginning was once chiefly a farm operation, but, since the turn of the century, it has been streamlined into a highly specialized commercial activity. The aggregate investment in ginning facilities currently in operation probably approaches 400 million dollars.

For many years, the trend in ginning has been toward fewer but larger and better equipped gin plants, designed to handle the cotton crop more efficiently, particularly in maintaining quality. The number of active gins in the United States has decreased from 26,234 in 1910 to 7,069 in 1954, and volumes of ginning per gin at the same time have increased from 443 bales to almost 2,000 bales (table 1). Volume of ginning is a major factor in the cost structure of gin operation; at a given gin, usually, as volume of business increases, total ginning cost per bale decreases.

Growers have a direct interest not only in charges paid for ginning services but in gin equipment available and manner of its use. Grade, an important factor in determining the market value of cotton, can be influenced appreciably by the quality of the ginning service. The entire cotton industry depends largely upon ginners to preserve the inherent quality of cotton lint.

Significance of ginning as an item of cost to growers is shown by the fact that the estimated total charges paid for ginning services averaged almost 161 million dollars yearly for the seasons 1947-48 to 1954-55. Seasonal charges during the 8-year period ranged from 107 million dollars in 1947-48 to an all-time high of about 209 million dollars in 1953-54.

Ginners normally buy the cottonseed from each lot of seed cotton they gin, and deduct the ginning charges from amounts due farmers for seed. During the 27 years 1928-29 to 1954-55, ginning charges per 500-pound gross weight bale have averaged about 41 percent of the farm value of the cottonseed (table 2). But in the depression of the early 1930's, charges paid by growers often exceeded the value of the seed.

1/ This is the fourth in a series of reports dealing with ginning charges and related data in the United States. Previous reports in order of release were: (1) Rates for Ginning and Wrapping American Cotton and Related Data, Seasons 1928-29 to 1935-36, by J. W. Wright and W. B. Lanham, Bur. Agr. Econ., January 1937 (mimeographed); (2) Charges for Ginning Cotton, by John W. Wright and R. C. Soxman, Agr. Mktg. Serv., January 1942 (processed); and (3) Charges for Ginning Cotton, 1941-42 to 1946-47, by Arthur L. Roberts and A. J. Fortenberry, Prod. and Mktg. Admin., September 1947 (processed). This report includes data for the period 1947-48 to 1954-55 and brings up to date some of the material contained in the previous publications.

Table 1.--Cotton production in the United States, number of active gins, and average volume of ginning per gin, seasons 1910-11 to 1954-55

Season	Cotton production 1/	Active gins	Average volume of ginning per gin	Season	Cotton production 1/	Active gins	Average volume of ginning per gin
	Bales	Number	Bales		Bales	Number	Bales
1910-11	11,608,616	26,234	443	1933-34	13,047,262	13,543	963
1911-12	15,692,701	26,349	596	1934-35	9,636,559	12,663	761
1912-13	13,703,421	25,279	542	1935-36	10,638,391	12,812	830
1913-14	14,156,486	24,749	572	1936-37	12,398,882	12,625	982
1914-15	16,134,930	24,547	657	1937-38	18,945,028	12,838	1,476
1915-16	11,191,820	23,162	483	1938-39	11,944,340	12,279	973
1916-17	11,449,930	21,624	530	1939-40	11,815,759	11,885	994
1917-18	11,302,375	20,351	555	1940-41	12,564,988	11,650	1,079
1918-19	12,040,532	19,259	625	1941-42	10,741,589	11,148	964
1919-20	11,420,763	18,815	607	1942-43	12,819,506	10,775	1,190
1920-21	13,439,603	18,440	729	1943-44	11,428,747	10,090	1,133
1921-22	7,953,641	16,192	491	1944-45	12,230,053	9,470	1,291
1922-23	9,762,069	15,420	633	1945-46	9,016,067	8,632	1,044
1923-24	10,139,671	15,298	663	1946-47	8,639,595	8,257	1,046
1924-25	13,627,936	15,478	880	1947-48	11,856,743	8,272	1,433
1925-26	16,103,679	15,482	1,040	1948-49	14,868,269	8,249	1,802
1926-27	17,977,374	15,753	1,141	1949-50	16,127,948	8,097	1,992
1927-28	12,956,043	14,863	872	1950-51	10,014,335	7,570	1,323
1928-29	14,477,874	14,974	967	1951-52	15,148,272	7,650	1,980
1929-30	14,824,861	14,868	997	1952-53	15,139,472	7,364	2,056
1930-31	13,931,597	14,508	960	1953-54	16,464,804	7,141	2,306
1931-32	17,095,594	14,151	1,208	1954-55 2/	13,678,803	7,069	1,935
1932-33	13,001,508	13,570	958				

1/ 500-pound gross-weight bales.
2/ Preliminary.

Compiled from reports of the Bureau of the Census.

Table 2.--Average charges for ginning services, farm value of cottonseed and cotton lint, and percent of farm values represented by ginning charges, seasons 1928-29 to 1954-55

Season	Per 500-pound gross-weight bale				Percent of farm value of cottonseed represented by ginning charges	Percent of combined farm value of cottonseed and lint represented by ginning charges
	Charges for ginning services	Farm value of--				
		Cotton-seed	Cotton lint	Combined cotton-seed and lint		
	Dollars	Dollars	Dollars	Dollars	Percent	Percent
1928-29...	5.96	15.18	89.90	105.08	39.3	5.7
1929-30...	5.74	13.75	83.90	97.65	41.7	5.9
1930-31...	5.05	9.82	47.30	57.12	51.4	8.8
1931-32...	4.04	3.99	28.30	32.29	101.3	12.5
1932-33...	4.34	4.58	32.60	37.18	94.8	11.7
1933-34...	4.76	5.73	50.85	56.58	83.1	8.4
1934-35...	5.05	14.71	61.80	76.51	34.3	6.6
1935-36...	5.03	13.56	55.45	69.01	37.1	7.3
1936-37...	4.93	14.79	61.80	76.59	33.3	6.4
1937-38...	4.89	8.68	42.05	50.73	56.3	9.6
1938-39...	4.72	9.69	43.00	52.69	48.7	9.0
1939-40...	4.67	9.41	45.45	54.86	49.6	8.5
1940-41...	4.76	9.65	49.45	59.10	49.3	8.1
1941-42...	5.71	21.24	85.15	106.39	26.9	5.4
1942-43...	5.95	20.33	95.25	115.58	29.3	5.1
1943-44...	6.18	21.32	99.50	120.82	29.0	5.1
1944-45...	6.44	21.11	103.65	124.76	30.5	5.2
1945-46...	6.40	20.76	112.60	133.36	31.1	4.8
1946-47...	8.09	29.22	163.15	192.37	27.7	4.2
1947-48...	9.00	33.92	159.60	193.52	26.5	4.6
1948-49...	9.65	26.88	151.90	178.78	35.9	5.4
1949-50...	10.47	17.81	142.85	160.66	60.2	6.5
1950-51...	11.19	35.40	199.50	234.90	31.6	4.8
1951-52...	12.04	28.85	188.45	217.30	41.7	5.5
1952-53...	12.44	28.47	170.85	199.32	43.7	6.2
1953-54...	12.69	21.58	160.50	182.08	58.8	7.0
1954-55...	12.83	1/ 25.15	1/ 164.30	189.45	51.0	6.8
27-year average...	7.26	17.55	99.13	116.68	41.4	6.2

1/ Preliminary.

For the 8-year period 1947-48 to 1954-55, ginning charges represented about 43 percent of the farm value of cottonseed, ranging from about 26 percent in 1947-48 to 60 percent in 1949-50. During the same period, ginning charges as a proportion of the combined farm value of seed and lint averaged about 6 percent and ranged from 4.6 percent in 1947-48 to 7.0 percent in 1953-54. These figures parallel those covering the entire 26-year period.

SOURCES OF DATA

Information contained in this report is based primarily on annual field surveys of selected gins representing more than 10 percent of the active gins in the Cotton Belt. Gins included in the sample each season were selected to provide a cross-section of the industry from the standpoint of size, geographical location, operating practices, equipment installed, and varieties of cotton ginned. These data are supplemented by those from secondary sources, which are cited in each instance.

METHODS OF ASSESSING GINNING CHARGES

Ginners in the United States usually adopt one of four basic methods of assessing charges for ginning, as follows:

1. A rate per hundredweight of seed cotton.
2. A rate per hundredweight of lint.
3. A flat charge per bale.
4. A toll charge (a stated proportion of the seed cotton to become the property of the ginner).

Individual ginners rarely apply more than one method of assessing charges during a season. The method used is determined chiefly by two somewhat interrelated factors--local custom and condition of seed cotton received at the gin. Rates under each method may include the cost of bagging and ties, but in most instances, separate charges are made for wrapping materials.

Charges are based on seed cotton weights in most areas where rough harvesting is common or where both handpicked and roughly harvested cotton normally are received at the gin. In some States one method is used almost exclusively, while in others all four of the basic systems are employed to some extent. In any one State, however, one method usually predominates.

The charge per hundredweight of seed cotton continues in widest use for the Cotton Belt as a whole. During the 3 periods in which these data were assembled--the 13 years 1928-40, the 6 years 1941-46, and the 8 years 1947-54--use of this method in the United States increased from 58 to 66 to 72 percent of the crop, respectively. Use of each of the other methods decreased in successive periods.

From 1947-48 to 1954-55, charges for ginning practically all of the crop in the Western and Southwestern regions and almost three-fourths of that in the South Central region were assessed on the basis of seed cotton weights (table 3). In the Southeastern region, this method was used extensively only in North Carolina, and its use there has been decreasing.

Charges based on the hundredweight of lint were assessed on about 19 percent of the total crop during the seasons 1947-48 to 1954-55. This system predominated only in the Southeast and there only in two States--Georgia and South Carolina. Louisiana was the only other State in which this method was used most commonly.

A flat charge per bale for ginning was made on about 9 percent of the bales ginned in the United States from 1947-48 to 1954-55. Widest use of this method occurred in the Southeast, but there it predominated in only one major cotton State--Alabama. Charges for about one-tenth of the crop in the South Central region were assessed on a per-bale basis, the most noticeable application of this method being in Tennessee.

From all indications, the toll method of collecting ginning revenue is gradually being abandoned, although it was never of great importance in any one State within the past few decades. The practice by ginners of accepting fixed proportions of seed cotton in payment for ginning services usually was employed only in those States where handpicking was the predominant harvesting method and where seed cotton weights were fairly uniform throughout the season. The usual charge was 5 percent of the seed cotton weight if ginning included bagging and ties, or 4 percent if separate charges were made for wrapping materials.

In a few States, cotton is sometimes ginned and wrapped in exchange for the cottonseed. From 1947-48 to 1954-55, this practice was confined entirely to the South Central region, and there it represented only about 1 percent of ginnings. This method customarily is used only on very roughly harvested cotton received near the end of the season.

CHARGES FOR GINNING COTTON

Because of the several systems of assessing charges throughout the Cotton Belt, ginning rates as such are not directly comparable. 2/ Therefore, rates have been converted to a common base, representing the charge to the grower for ginning and wrapping a 500-pound gross-weight bale. 3/

2/ Estimated average charges under each of the various systems of assessing charges are reported by States and seasons in tables 25 to 32, pages 39 to 46.

3/ Formulas used in converting rates under the various systems to a common base are listed on page 47.

Table 3.--Methods of assessing ginning charges: Proportionate use of specified methods by States and regions; average for 8-year period 1947-48 to 1954-55

State and region	Method of assessing ginning charge				
	Per bale	Per cwt. lint	Per cwt. seed cotton	Seed cotton toll	Total
	Percent	Percent	Percent	Percent	Percent
Alabama	68.5	28.5	2.5	0.5	100.0
Florida	55.0	45.0	—	—	100.0
Georgia	10.5	82.2	4.7	2.6	100.0
North Carolina	19.3	38.3	41.6	.8	100.0
South Carolina	5.7	85.0	9.3	—	100.0
Virginia	81.5	—	18.5	—	100.0
Southeastern region	30.0	57.7	11.3	1.0	100.0
Arkansas	2.0	2.3	95.0	—	1/ 99.3
Louisiana	0.1	81.4	18.5	—	100.0
Mississippi	8.7	11.9	79.4	2/	100.0
Missouri	0.1	—	95.7	—	1/ 95.8
Tennessee	54.3	6.9	34.8	.4	1/ 96.4
South central region	9.9	16.9	72.1	.1	1/ 99.0
Oklahoma	—	—	100.0	—	100.0
Texas	2/	6.1	93.9	—	100.0
Southwestern region	2/	5.6	94.4	—	100.0
Arizona	—	—	100.0	—	100.0
California	—	—	100.0	—	100.0
New Mexico	—	—	100.0	—	100.0
Western region	—	—	100.0	—	100.0
United States	9.2	18.7	71.6	0.2	1/ 99.7

1/ Differences between 100 percent and the percentages shown represent cotton ginned in exchange for the cottonseed.

2/ Less than 0.05 percent.

Charges for Ginning Upland Cotton

Through the last 20-odd years, charges for ginning upland cotton have followed rather distinct regional patterns. Average charges per 500-pound gross-weight bale since 1928 have been lowest in the Southeast, and since 1932 have been highest in the Southwest (fig. 1). For the last quarter-century, ginning charges in the South Central and Western regions have followed a rather parallel course.

The low level of charges in the Southeast results from several factors, chief of which are: (1) Labor normally is less expensive than in other regions, (2) practically all cotton is harvested by handpicking, (3) the average gin is less elaborately equipped, and (4) second-hand wrapping materials are used to a greater extent than in other regions.

In direct contrast, the continuing high level of charges in the Southwest results from factors almost the reverse of those in the Southeast: Labor is more expensive; most of the crop is roughly harvested, either handsnapped or mechanically stripped; more elaborate gins are necessary to handle the cotton and maintain its inherent quality; and new bagging and ties are used almost exclusively.

From 1947-48 to 1951-52, the Western region ranked next to lowest in ginning charges, but in more recent seasons it has ranked next to highest. Reasons for this rising level of charges are: (1) Increased proportions of the crop harvested by mechanical pickers, (2) relatively higher labor costs, and (3) the tremendous costs involved in erecting new gins or modernizing existing gins with necessary machinery and equipment to handle mechanically harvested cotton. The number of active gins in the West has more than doubled since 1945, whereas the number of gins in other regions has steadily decreased.

During the 8-year period 1947-48 to 1954-55, seasonal average charges by ginners in the United States for ginning and wrapping upland cotton ranged from $9 per 500-pound gross-weight bale in 1947 to $12.83 in 1954 (table 4). Progressive increases occurred from season to season for the Cotton Belt as a whole. In the last few years, however, charges have tended to level off somewhat. In Alabama, charges decreased very slightly in each of the last two seasons, and in 1954-55 average charges in six other States were a trifle lower than for the prior season.

Ginning charges not only vary widely among regions but even between States in the same region. For the period 1947-48 to 1954-55, charges in Missouri averaged $15.55 per 500-pound bale, the highest for any of the major cotton-producing States (fig. 2). Similar charges in Tennessee, which adjoins Missouri, averaged $9.69 per bale, and ranked 11th from the high among the 16 major cotton States.

In most States, charges for drying seed cotton and, in recent seasons, charges for lint cleaning, if either driers or lint cleaners were used, were included in the ginning rate. However, in Arizona and California and in isolated cases in a few other States, separate charges were made for these services. Generally, total charges were no higher in such cases, but represented only a difference in method of charging for the complete ginning service. These additional charges are reflected in average charges for ginning, reported in table 4 and elsewhere cited in this report, for the period 1947-48 to 1954-55.

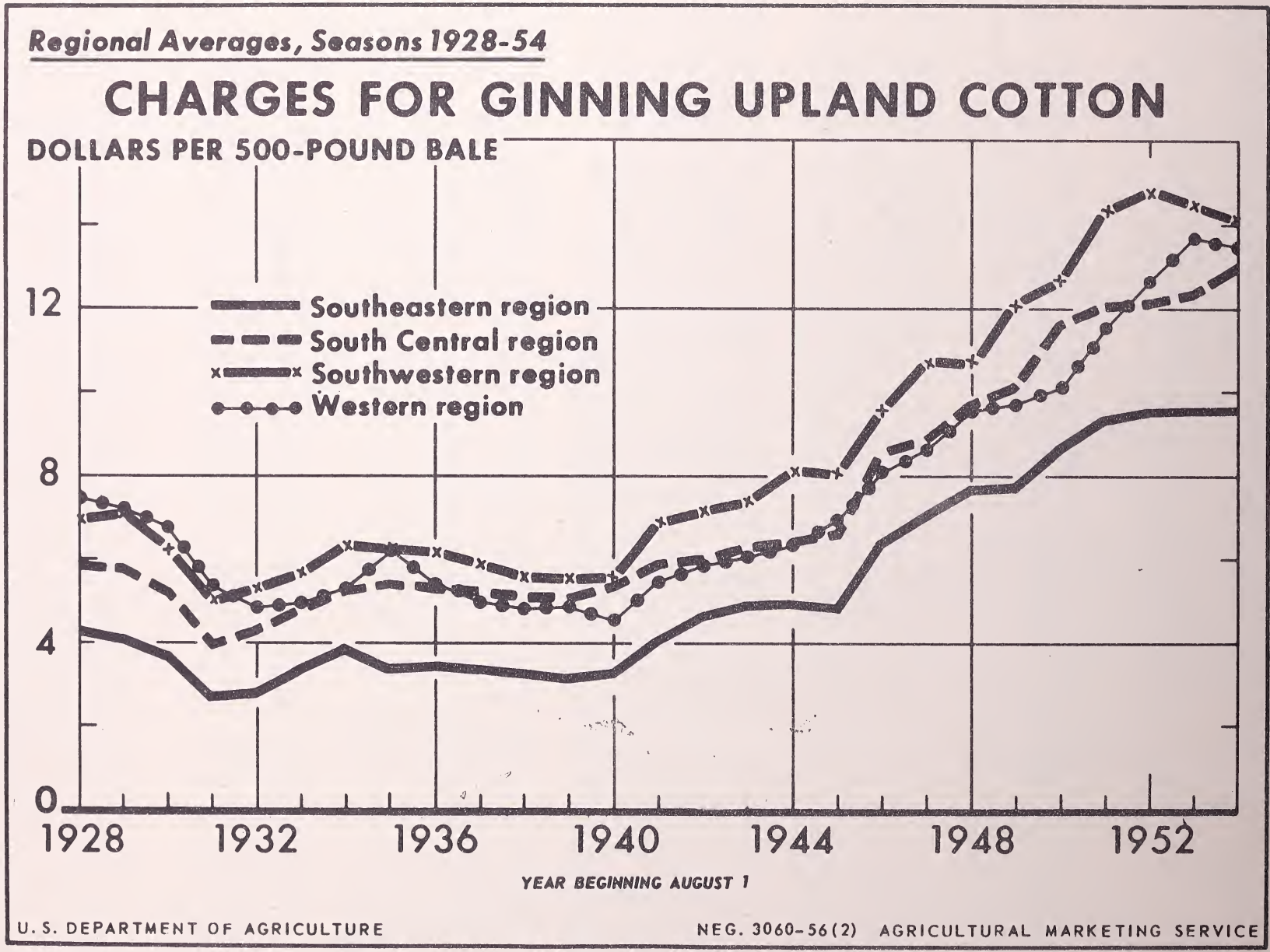
Regional Averages, Seasons 1928-54
CHARGES FOR GINNING UPLAND COTTON
DOLLARS PER 500-POUND BALE
12
8
4
0
Southeastern region
South Central region
Southwestern region
Western region
1928
1932
1936
1940
1944
1948
1952
YEAR BEGINNING AUGUST 1
U.S. DEPARTMENT OF AGRICULTURE
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Figure 1

Table 4.--Charges for ginning services: Estimated averages per 500-pound gross-weight bale of upland cotton, by States and regions, seasons, 1947-48 to 1954-55

State and region	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	Average 1947-48 to 1954-55
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Alabama	7.08	7.35	7.22	8.00	8.37	8.95	8.89	8.84	8.05
Florida	7.13	7.31	7.59	8.72	10.00	10.82	11.18	10.71	9.71
Georgia	6.87	7.58	7.74	8.90	9.71	9.74	9.77	9.72	8.81
North Carolina	7.39	8.36	8.31	9.38	10.07	10.23	10.31	10.54	9.27
South Carolina	7.00	7.75	8.01	9.00	9.58	9.48	9.81	9.76	8.77
Virginia	6.72	8.00	7.57	7.24	8.68	8.33	9.13	9.85	8.18
Southeastern region	7.06	7.70	7.73	8.67	9.36	9.53	9.57	9.58	8.63
Arkansas	9.50	10.23	10.48	12.73	13.42	13.36	13.39	14.24	12.04
Louisiana	8.26	9.04	9.08	10.55	11.17	12.01	12.04	12.59	10.68
Mississippi	8.09	9.02	9.55	10.33	10.68	10.69	11.15	11.27	10.09
Missouri	12.11	13.24	13.79	17.51	17.75	16.97	16.56	17.46	15.55
Tennessee	7.77	8.40	8.48	10.02	10.40	10.42	10.91	11.12	9.69
South Central region 1/	8.81	9.68	10.08	11.62	12.01	12.08	12.31	12.96	11.15
Oklahoma	11.68	12.32	12.76	13.27	15.84	14.87	15.12	15.06	13.85
Texas	10.65	11.54	12.02	12.58	14.18	14.79	14.34	14.00	13.05
Southwestern region	10.74	11.63	12.08	12.63	14.34	14.79	14.41	14.07	13.12
Arizona	8.90	9.11	9.10	9.52	11.41	12.13	13.75	12.47	11.53
California	8.40	9.40	9.54	10.15	11.20	12.92	13.65	14.20	11.66
New Mexico	9.21	10.77	11.70	11.14	14.42	12.97	13.68	12.66	12.33
Western region	8.62	9.54	9.70	10.09	11.56	12.69	13.69	13.47	11.69
United States	9.00	9.65	10.47	11.19	12.04	12.44	12.69	12.83	11.36

1/ Includes Illinois and Kentucky.

State Averages, 1947-54

CHARGES FOR GINNING UPLAND COTTON

Year Beginning August 1

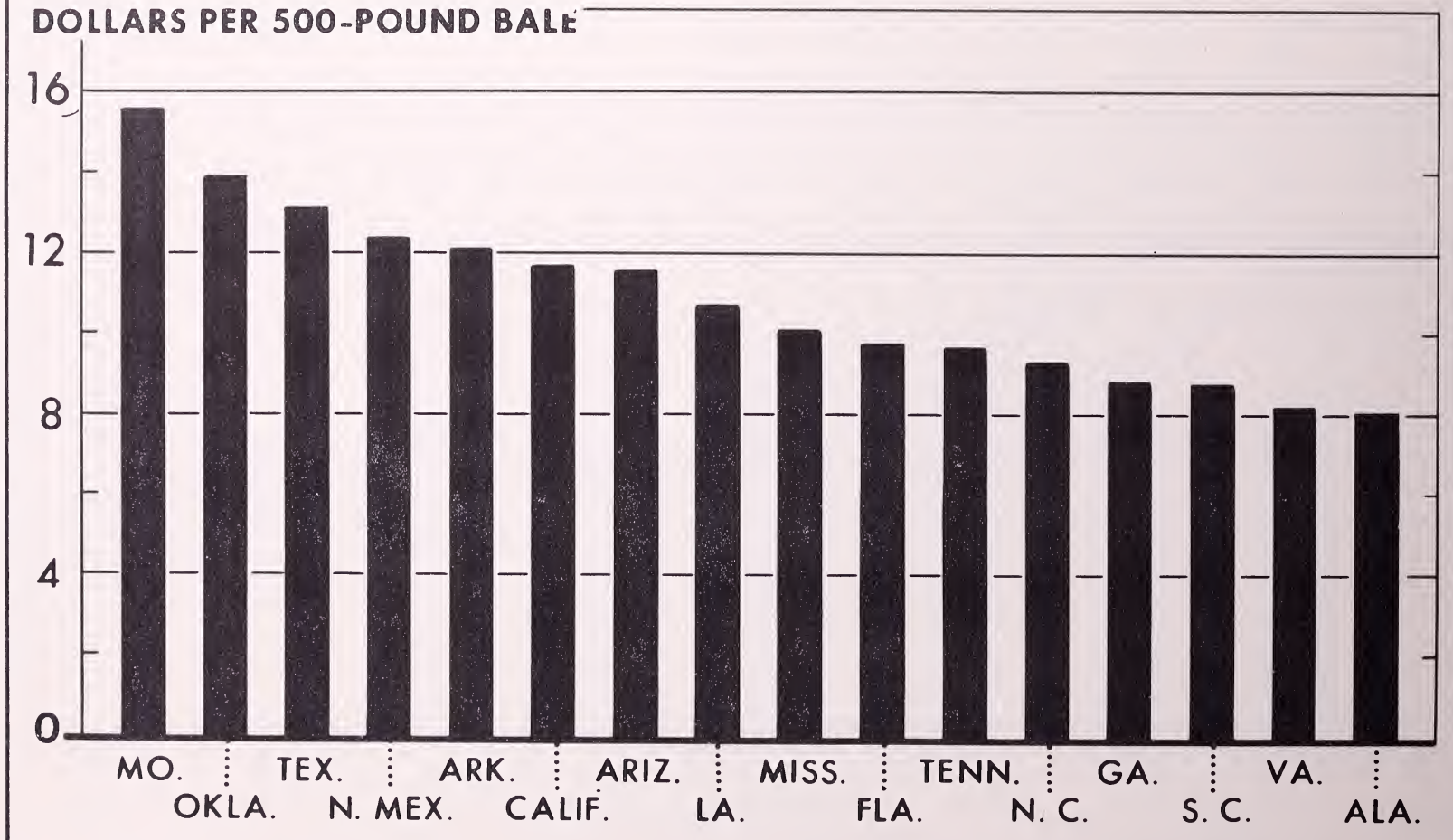

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Figure 2

Charges for Ginning American-Egyptian Cotton

American-Egyptian cotton has been grown commercially in the United States since 1918, and during the 8-year period 1947-48 to 1954-55, production ranged from a low of 1,208 bales in 1947-48 to a record high of 93,467 bales in 1952-53 (table 5). This specialty cotton is produced almost exclusively in the irrigated sections of Arizona and the Rio Grande Valley of Texas and New Mexico and is ginned on roller gins because of its extra-long fiber and comparatively slick seed.

Table 5.--Production of American-Egyptian cotton in the United States, and average charge for ginning and wrapping per 500-pound gross-weight bale, seasons 1947-48 to 1954-55

Season	Production 1/	Average charge for ginning and wrapping per 500-pound gross-weight bale
	Bales	Dollars
1947-48	1,208	15.47
1948-49	3,465	17.90
1949-50	3,889	18.20
1950-51	62,235	21.06
1951-52	46,049	21.24
1952-53	93,467	22.81
1953-54	64,527	23.52
1954-55	40,919	20.24

1/ Running bales.

Charges for ginning American-Egyptian cotton are considerably higher than for upland cotton ginned on saw gins because roller gin operation requires much more attention and labor. Also, charges customarily are assessed on the basis of the hundredweight of seed cotton, and relatively large quantities are necessary to produce a 500-pound gross-weight bale.

From 1947-48 to 1954-55, average charges for ginning this extra-staple cotton in the United States ranged from $15.47 per 500-pound bale in 1947-48 to $23.52 per bale in 1953-54. Charges were progressively higher from one season to another except for 1954-55, when the average charge was about 14 percent below that of the previous season. This apparently was due, for the most part, to more favorable gin turnouts as the result of increased production of a new and improved strain.

FACTORS AFFECTING GINNING CHARGES

Average charges for ginning, on a Belt-wide basis, have more than doubled since 1928, as have costs of numerous other services and products. Growers, however, are expecting and receiving a greatly different type of ginning service than was provided 25 years ago. Changes in methods of harvesting have placed greatly increased responsibilities on ginners for preserving cotton quality, causing numerous ginners to revamp their operations substantially.

Numerous factors, both measurable and immeasurable, have some bearing on the charges paid by growers for ginning services. Some of the most important considerations include: (1) The level of business or economic conditions and their relation to wages and prices generally, (2) methods of harvesting, (3) weight of seed cotton per bale of lint, (4) capacity of gins and volume of ginning, (5) types of gin equipment and manner and extent of use, and (6) quality of the ginning service.

General Business and Economic Conditions

Ginning, for the most part, is considered a highly competitive industry, and charges therefore are influenced largely by the cost of and demand for the service. However, in Oklahoma, ginning rates are regulated by State authority.

On a Belt-wide basis, ginning charges over a period of time tend to vary directly with general economic conditions. From 1928 to 1948, the level of ginning charges paralleled very closely the U. S. wholesale price index for all commodities, an index widely recognized as a reliable indicator of price levels (table 6 and figure 3). Beginning in 1949 and continuing through 1955, however, charges showed considerable advance not registered by the index of wholesale prices, apparently as a result of increased demands upon the industry for additional equipment and services to meet changes in harvesting practices.

In relation to farm prices for cotton, ginning charges--as is the case with any service charge--generally are subject to only minor changes from one season to another while cotton prices often change sharply. Over a long period, however, there is a general relationship between ginning charges paid and prices received by growers.

Methods of Harvesting Cotton

Variations in ginning charges from one section of the Cotton Belt to another often are the result of differences in harvesting practices. In those areas where charges are assessed according to the hundredweight of seed cotton, charges necessarily are higher per bale for handsnapped than for handpicked cotton due to the additional weight of excess trash and higher investments in ginning facilities.

Table 6.--Indexes of average charges for ginning cotton as related to indexes of average farm prices of upland cotton and the wholesale price indexes for all commodities, seasons 1928-29 to 1954-55 (1947-49=100)

Season 1/	Average charge per 500-pound bale for ginning services	Average farm price of cotton per pound 2/	Wholesale prices for all commodities
	Index	Index	Index
1928-29	60.9	59.7	61.7
1929-30	58.7	55.7	59.5
1930-31	51.6	31.4	50.7
1931-32	41.3	18.8	43.9
1932-33	44.4	21.6	41.1
1933-34	48.7	33.8	47.1
1934-35	48.7	41.0	51.0
1935-36	51.4	36.8	52.1
1936-37	50.4	41.0	55.3
1937-38	50.0	27.9	53.1
1938-39	48.3	28.5	50.0
1939-40	47.8	30.1	50.9
1940-41	48.7	32.6	53.1
1941-42	58.4	56.3	62.0
1942-43	60.8	62.7	66.2
1943-44	63.2	65.6	67.3
1944-45	65.8	68.8	68.2
1945-46	65.4	74.7	71.1
1946-47	82.7	108.3	91.1
1947-48	92.0	106.0	102.0
1948-49	98.7	100.1	102.2
1949-50	107.1	94.9	98.8
1950-51	114.4	132.5	112.5
1951-52	123.1	125.1	112.7
1952-53	127.2	113.4	110.4
1953-54	129.8	106.6	110.5
1954-55	131.2	111.3	110.1

1/ Year beginning August 1.

2/ Data for seasons 1928-29 to 1935-36 represent prices for all cotton; data from 1936-37 to 1954-55 represent prices for upland cotton only.

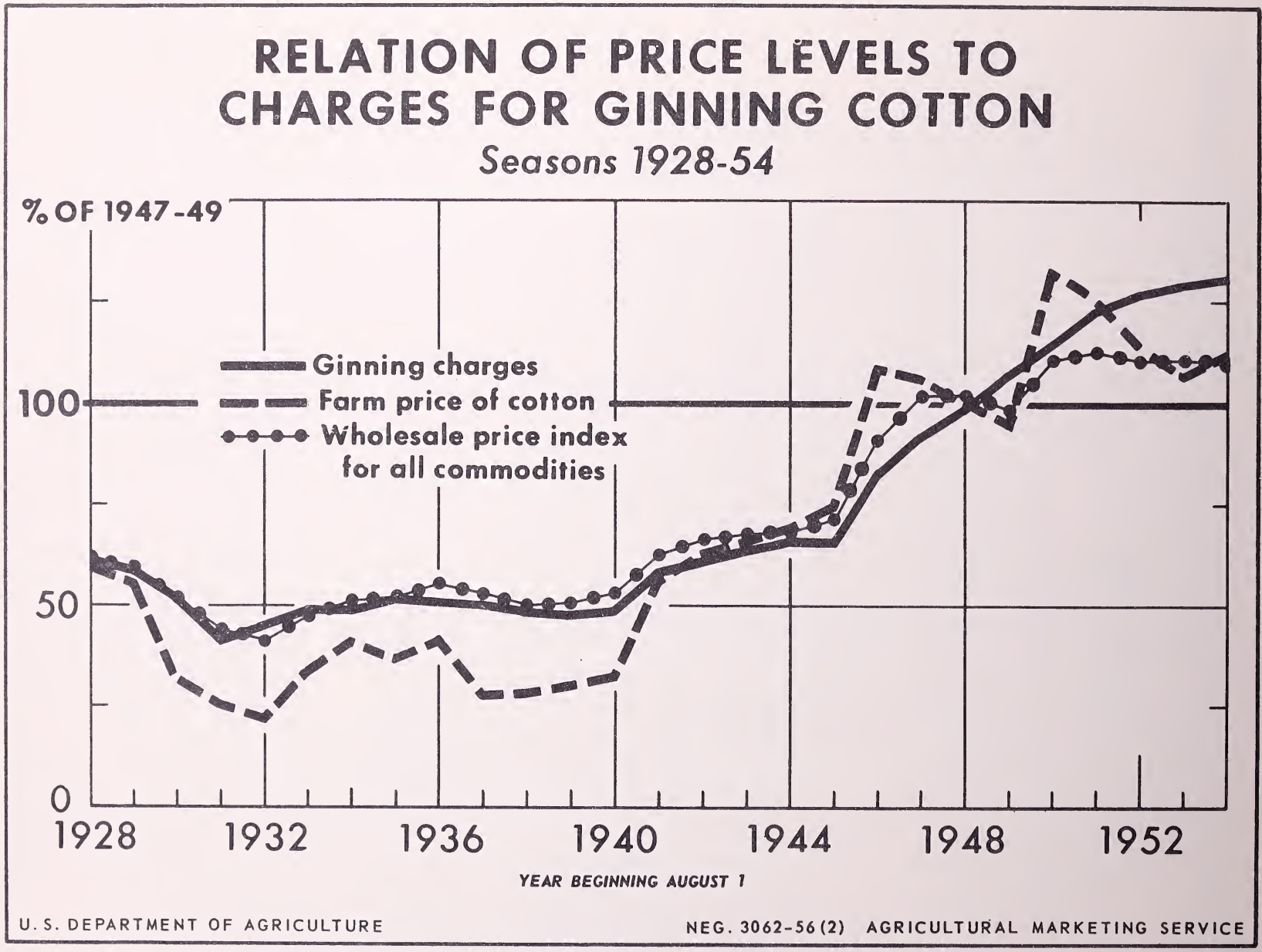
RELATION OF PRICE LEVELS TO
CHARGES FOR GINNING COTTON
Seasons 1928-54
% OF 1947-49
100
50
0
Ginning charges
Farm price of cotton
Wholesale price index
for all commodities
1928
1932
1936
1940
1944
1948
1952
YEAR BEGINNING AUGUST 1
U.S. DEPARTMENT OF AGRICULTURE
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Figure 3

Table 7.--Proportion of upland cotton harvested by specified methods, by States and regions, seasons 1947-48 and 1954-55

State and region	Method of harvesting									
	1947-48					1954-55				
	Hand-picked	Machine picked	Hand-snapped	Machine stripped	Total	Hand-picked	Machine picked	Hand-snapped	Machine stripped	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Alabama	98.9	--	1.1	--	100.0	92.9	2.3	4.6	0.2	100.0
Georgia	98.8	0.1	1.1	--	100.0	95.6	3.0	1.4	1/	100.0
North Carolina	87.5	0.1	12.2	0.2	100.0	97.0	2.8	0.2	1/	100.0
South Carolina	98.1	0.3	1.6	--	100.0	96.2	3.8	--	1/	100.0
Southeastern region 2/	96.7	0.1	3.1	1/	100.0	95.1	2.9	1.9	0.1	100.0
Arkansas	83.7	0.2	16.1	--	100.0	64.3	15.8	19.7	0.2	100.0
Louisiana	99.9	0.1	--	--	100.0	57.8	28.2	13.8	0.2	100.0
Mississippi	96.8	0.3	2.9	--	100.0	83.1	10.7	6.2	--	100.0
Missouri	77.5	--	22.5	--	100.0	61.1	21.9	16.8	0.1	100.0
Tennessee	88.7	1/	11.3	--	100.0	88.8	1.1	10.1	1/	100.0
South central region 3/	90.7	0.2	9.1	--	100.0	72.8	14.4	12.7	0.1	100.0
Oklahoma	19.7	--	79.0	1.3	100.0	1.3	0.2	83.8	14.7	100.0
Texas	47.2	--	46.7	6.1	100.0	20.3	2.6	58.6	18.5	100.0
Southwestern region	44.8	--	49.5	5.7	100.0	18.9	2.4	60.4	18.3	100.0
Arizona	78.9	--	21.1	--	100.0	47.7	44.5	7.8	--	100.0
California	93.4	1/	6.6	--	100.0	34.4	61.7	3.9	--	100.0
New Mexico	83.0	--	16.4	0.6	100.0	70.5	8.0	19.6	1.9	100.0
Western region	89.0	1/	10.9	0.1	100.0	42.7	50.2	6.9	0.2	100.0
United States	77.5	0.1	20.6	1.8	100.0	54.2	15.9	24.3	5.6	100.0

1/ Less than 0.05 percent. 2/ Includes Florida and Virginia. 3/ Includes Illinois and Kentucky.

Handpicking continues to be the principal method of harvesting in the United States, although its use by growers declined noticeably during the last 10 years. Use of mechanical methods in harvesting increased considerably over the entire Cotton Belt, while the practice of handsnapping varied moderately from season to season. Factors prompting the shift from conventional handpicking to other methods are chiefly: (1) A growing scarcity of labor, (2) increasing costs of handpicking, (3) the trend toward complete mechanization of farming operations, and (4) speed-up of harvest during favorable weather.

From 1947-48 to 1954-55, proportions of the United States cotton crop harvested by handpicking decreased from about 78 percent to 54 percent (table 7). Over the same period, the use of mechanical pickers steadily increased from an almost negligible proportion in the earliest season to about 16 percent in 1954-55. Harvesting by mechanical strippers increased moderately while handsnapping varied seasonally from about 18 to 26 percent.

The extent to which the different methods were used varied considerably from one region to another. In both 1947-48 and 1954-55, most of the cotton grown in the Southeastern and South Central regions was harvested by handpicking. In the Southwest, handsnapping predominated in both seasons, and its use gradually increased during the 8-year period.

Greatest strides in use of mechanical pickers were made in the Western region where such machines now harvest more than one-half of the crop. In 1947-48, nearly nine-tenths of the Western crop was harvested by handpicking. However, production in that area has increased greatly and mounting labor costs were met by wide-scale introduction of machines.

Before 1950, practically all of the American-Egyptian crop was harvested by handpickers, but in recent years, mechanical pickers have been used to a considerable extent (table 8). Almost one-fourth of the crop during the last three seasons was picked by machine but less than 1 percent was handsnapped since this extra-long-fibered cotton is more difficult to clean than upland cottons.

Table 8.--Proportions of American-Egyptian cotton harvested by specified methods, seasons 1950-51 to 1954-55

Season	Method of harvesting-			
	Handpicked	Handsnapped	Machine picked	Total
	Percent	Percent	Percent	Percent
1950-51	95.4	3.0	1.6	100.0
1951-52	84.6	4.0	11.4	100.0
1952-53	75.0	.5	24.5	100.0
1953-54	71.5	4.0	24.5	100.0
1954-55	75.5	.5	24.0	100.0

Weight of Seed Cotton per Bale

Charges for ginning assessed on the basis of the hundredweight of seed cotton are directly affected by the quantities of cotton necessary to produce a bale of lint. The amounts of seed cotton required to produce a 500-pound bale vary widely in weight mainly because of methods used in harvesting and to a lesser extent according to variety. Variations in weights between bale-lots of handpicked and handsnapped seed cotton, for example, often are as great as 700 pounds. From an economic standpoint, such differences are very important since charges over the Cotton Belt most commonly are assessed on seed-cotton weights.

From 1947-48 to 1954-55, weights of handpicked upland seed cotton needed per 500-pound gross-weight bale in the United States ranged from 1,305 pounds in the earlier season to 1,392 pounds in 1954-55 (table 9). A slight upward trend in weights was indicated, although some variations occurred within the period. Weights of handpicked seed cotton needed per bale were higher in Missouri, Oklahoma, and Texas, and in recent seasons have increased considerably in Arizona and California.

Table 9.--Average weight of handpicked seed cotton required per 500-pound gross-weight bale of upland cotton, by States, seasons 1947-48 to 1954-55

State	Season							
	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Alabama	1,256	1,298	1,341	1,299	1,334	1,315	1,299	1/
Arizona	1,304	1,385	1,333	1,319	1,440	1,475	1,415	1,408
Arkansas	1,309	1,299	1,375	1,369	1,396	1,338	1,346	1,405
California	1,289	1,315	1,327	1,363	1,400	1,420	1,410	1,478
Florida	2/	2/	2/	2/	2/	2/	2/	2/
Georgia	1,271	1,309	1/	1/	1/	1/	1/	1/
Louisiana	1,307	1,306	1/	1/	1/	1/	1/	1/
Mississippi	1,261	1,269	1,330	1,303	1,319	1,289	1,328	1,339
Missouri	1,418	1,398	1,481	1,460	1,500	1,421	1,408	1,481
New Mexico	1,332	1,346	1,327	1,344	1,411	1,312	1,389	1,333
North Carolina	1,268	1,332	1,350	1,327	1,342	1,343	1,320	1/
Oklahoma	1,410	1,503	1,378	1,391	1,410	1,336	1,368	1,443
South Carolina	2/	2/	2/	2/	2/	2/	2/	2/
Tennessee	1,277	1,285	1,360	1,344	1,354	1,324	1,326	1,346
Texas	1,384	1,384	1,376	1,427	1,432	1,397	1,403	1,410
Virginia	1,275	1,325	1,393	1,344	1,309	1,366	1,293	1,307
United States	1,305	1,316	1,358	1,356	1,371	1,347	1,367	1,392

1/ Insufficient data.
2/ Seed cotton customarily not weighed.

For the most part, differences in weights required per bale reflect differences in methods used in harvesting, but the variety of cotton grown is an important factor. Although the major part of the American crop is still harvested

by handpicking, the trend toward rougher harvesting methods is increasing rapidly. Even handpicked cotton varies widely in cleanness from one area to another.

Handsnapping is the normal harvesting method followed in parts of Texas and Oklahoma. In most other sections of the Belt, cotton is customarily handsnapped only in the late part of the season. Handsnapped cotton normally contains in addition to the burs, considerable other foreign matter such as leaf trash, stems, and dirt. In such cases, weights of seed cotton needed to produce a bale of lint are increased by several hundred pounds.

From the national standpoint, average weights of handsnapped seed cotton necessary to provide a standard-weight bale ranged from 1,856 pounds to 2,015 pounds during the 8-year period 1947-48 to 1954-55 (table 10). A slight upward trend in weights is indicated for the period as a whole. Such weights exceeded those for handpicked cotton by from 498 to 644 pounds each season. Belt-wide average weights of handsnapped seed cotton per bale reflect to a large extent weights of such cotton in the Southwest where most of the crop is handsnapped.

Table 10.--Average weight of snapped seed cotton required per 500-pound gross-weight bale of upland cotton, by specified States, seasons 1947-48 to 1954-55 1/

State	Season							
	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Alabama	1,709	1,820	1,929	1,878	1,818	1,648	1,655	2/
Arizona	1,905	2,220	2,050	1,978	2,283	2,163	2,488	2,256
Arkansas	1,913	1,925	1,835	1,987	2,037	2,088	2,087	2,033
California	2,096	2,075	2,280	2,337	2,432	2,244	2,608	2,637
Mississippi	1,791	1,662	1,612	1,605	1,621	1,857	1,915	1,791
Missouri	2,083	1,993	2,050	2,100	2,175	2,188	2,080	2,114
New Mexico	1,938	2,202	2,121	2,011	2,240	2,211	2,209	1,955
North Carolina	1,644	1,730	1,890	2,136	1,866	1,628	2/	2/
Oklahoma	1,922	1,934	1,877	1,977	1,970	1,938	1,935	1,902
Tennessee	1,903	1,876	1,970	1,931	1,932	1,926	1,974	1,899
Texas	1,879	1,996	1,834	1,930	2,001	1,954	1,972	1,910
United States	1,891	1,957	1,856	1,949	2,015	1,971	1,989	1,943

1/ Does not include States where this method of harvesting is not used or is of minor importance.

2/ Insufficient data.

The trend toward machine harvesting has increased since 1946 and considerable data have been accumulated since that year on seed cotton weights required per bale for mechanically picked and stripped cotton. For the entire crop during the 8-year period 1947-48 to 1954-55, weights of machine-picked seed

cotton ranged from 1,337 pounds to 1,524 (table 11). Over the 8-year period, weights of machine-picked cotton per bale exceeded handpicked weights by about 95 pounds, on the average.

Table 11.--Average weight of machine-picked and machine-stripped seed cotton required per 500-pound gross-weight bale, seasons 1947-48 to 1954-55

Season	Weights of seed cotton required per 500-pound gross-weight bale for--	
	Machine-picked cotton	Machine-stripped cotton
	Pounds	Pounds
1947-48	1,346	2,086
1948-49	1,337	2,154
1949-50	1,390	2,111
1950-51	1,387	2,167
1951-52	1,418	2,384
1952-53	1,452	2,291
1953-54	1,471	2,207
1954-55	1,524	2,173

From 1947-48 to 1954-55, weights of machine-stripped seed cotton per bale exceeded those for handpicked cotton by from 750 to 1,000 pounds each season. During the period 1941-42 to 1946-47, seasonal differences in bale-lot weights between handpicked and machine-stripped cotton ranged from about 900 to 1,200 pounds. The recently smaller weight difference between these two methods likely is due to both use of less care in handpicking and improvement in design and operation of strippers.

Although American-Egyptian cotton accounts for less than 1 percent of the total American crop each season, it is quite important to a limited number of growers in the irrigated sections of the West and Southwest. Ginning charges are assessed entirely on the basis of seed cotton weights, and rates are much higher than for upland varieties. Gin turnout, therefore, is a very important consideration to growers.

For the entire American-Egyptian crop during the period 1947-48 to 1954-55, quantities of handpicked seed cotton required per 500-pound bale ranged from 1,536 to 1,759 pounds (table 12). More than 1,900 pounds were necessary to gin a standard-weight bale in Arizona in 1953-54, but turnouts were much more favorable the following season due primarily to production of a new and improved strain. Information available on required weights of extra-long-staple seed cotton harvested by other methods than handpicking was very incomplete.

Table 12.--Average weight of handpicked seed cotton required per 500-pound gross-weight bale of American-Egyptian cotton, by States, seasons 1947-48 to 1954-55

State and area	Weight of seed cotton per bale in specified season							
	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Arizona	1,642	1,680	1,689	1,664	1,786	1,774	1,908	1,506
New Mexico	--	--	--	1,473	1,407	1,592	1,642	1,541
Texas (Dist.6)	1,578	1,475	1,537	1,516	1,619	1,563	1,682	1,544
Western area	1,593	1,536	1,599	1,603	1,654	1,648	1,759	1,552

Types of Gin Equipment

Under present-day methods of harvesting, gins in many areas require extensive auxiliary machinery in order to gin satisfactorily. This situation has caused many ginners in recent years to make expensive installations of additional conditioning and cleaning equipment. Added investments and operating costs represented by such equipment presumably have contributed to the upward trend in ginning charges.

Four principal types of auxiliary equipment are used in gins. This equipment includes: (1) Driers for reducing the moisture content of seed cotton that is too green or damp for proper cleaning and ginning, (2) extractors for removing burs, stems, limbs, and other bulky foreign matter, (3) cleaners for removing dirt and small particles of trash from the seed cotton, and (4) lint cleaners for removing dust, motes, and pin trash from the ginned lint. All gins use some of these types of equipment. Most of the newer or recently remodeled gins which handle roughly harvested cotton now operate all four types.

Even in 1945, the latest year for which complete data on gin equipment were available, considerable auxiliary equipment was in place throughout the Belt (table 13). In that season, gins in the Southeast had the least amount of equipment, and those in the Western region were the most elaborately equipped. Gins east of the Mississippi River generally do not receive as much roughly harvested cotton, and therefore do not require as extensive a combination of cleaning equipment as in the western half of the Cotton Belt. Since 1945, use of auxiliary equipment in gins has increased greatly. In fact some devices such as lint cleaners had not been manufactured commercially 10 years ago but are now commonplace in areas favoring their use.

At most gins in the United States, the use of auxiliary equipment is considered an integral part of the ginning operation, and regularly established charges for ginning cover necessary conditioning, cleaning, and extracting functions provided by available equipment. However, in Arizona and California, an additional charge usually is made at gins when driers and lint cleaners are used.

Table 13.--Proportions of gins equipped with specified equipment, by regions, crop years 1945 and 1940

Region	Gins with specified equipment 1/									
	Seed cotton driers		Master bur extractors		Overhead cleaners		Airline cleaners		Hull extracting cleaning feeders	
	1945	1940	1945	1940	1945	1940	1945	1940	1945	1940
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Southeastern	15	6	7	1	34	23	15	13	56	40
South Central	39	18	21	8	62	50	16	14	76	64
Southwestern	31	9	53	51	81	79	49	46	76	60
Western	72	36	62	32	89	81	50	52	76	61
United States	28	11	26	19	58	49	26	24	69	53

1/ Includes both active and inactive saw and roller gins, as reported by the U. S. Bureau of the Census.

Use of Seed Cotton Driers

Seed cotton driers were once found only in the more elaborate gin setups, but in recent years they have become standard equipment in most gins. In 1935-36, only 1 gin in 50 over the Cotton Belt was equipped with a drier (table 14). In 1954-55, 82 of every 100 gins had at least 1 drier of some type. Many of the more elaborate plants have 2 or more drying units or systems.

By regions, in 1954-55, 87 percent of the gins in the Southwest and practically all of those in the West were equipped with driers. In the Southeast and South Central regions, proportions of active gins with driers were 78 and 79 percent, respectively.

While 82 percent of the active gins in 1954-55 were equipped with driers, only 68 percent of the total crop passed through driers with heat applied. In 1945-46 only 36 percent of the gins had driers and 42 percent of the crop was subjected to heat before ginning. These comparative figures suggest that in the earlier season driers were found chiefly in gins with above average volumes--usually the larger and newer plants--and apparently were used on a very large proportion of bales received at such gins. In the latter season, most gins had driers but tended to make use of such equipment in a more selective manner.

The extent of drying practices at gins over the Cotton Belt, however, in no way indicates the manner of drying. The degree of heat applied by ginners may vary considerably and is dependent upon moisture in the seed cotton above the normal moisture content necessary for efficient ginning. Overdrying can be as damaging to the fiber as inadequate drying, both having appreciable influence on the ultimate quality of the ginned lint.

Table 14.—Proportion of active gins equipped with seed cotton driers, and proportion of total ginnings passed through driers, by States and regions, in specified seasons

State and region	Percentage of active gins equipped with driers in—			Percentage of ginnings passed through driers in—	
	1935-36 1/	1945-46 1/	1954-55 2/	1945-46 2/	1954-55 2/
	Percent	Percent	Percent	Percent	Percent
Alabama	1	20	79	23	58
Georgia	3/	23	76	24	64
North Carolina	1	16	66	37	63
South Carolina	3/	23	91	35	62
Southeastern region 4/	1	23	78	29	62
Arkansas	3	45	79	64	72
Louisiana	4	58	86	78	86
Mississippi	3	34	71	42	57
Missouri	11	98	6/ 100	88	74
Tennessee	1	34	80	47	58
South Central region 5/	3	45	79	56	67
Oklahoma	1	38	85	47	53
Texas	2	41	87	40	66
Southwestern region	1	40	87	41	65
Arizona	2	57	6/ 100	29	62
California	18	99	6/ 100	74	93
New Mexico	—	74	92	9	46
Western region	9	84	99	38	78
United States	2	36	82	42	68

1/ Based on reports of the U. S. Bureau of the Census with all inactive gins deleted on the assumption that only active gins were equipped with seed cotton driers.

2/ Data based on surveys by the Agricultural Marketing Service.

3/ Less than 0.5 percent.

4/ Includes Florida and Virginia.

5/ Includes Illinois and Kentucky.

6/ More than 99.5 percent; rounded to 100.

Over most of the Cotton Belt, drying charges are included in the ginning rate, but in Arizona and California, separate charges usually are assessed for drying services. In recent seasons, such charges have averaged about $1.50 per bale in both Arizona and California. Since large proportions of the crop in each of these States were subjected to this extra charge, the average cost of the entire ginning service was advanced considerably. For example, in 1954-55 additional expenditures by growers in California averaged $1.02 per bale for the entire California crop.

Use of Lint Cleaners

The latest item of equipment to come into prominent use is the lint cleaner, which is an outgrowth of increases in machine harvesting. Within the last 6 years, installations of lint cleaners have expanded to a spectacular extent. In 1948-49, such cleaners were chiefly an object of curiosity, operating in only 28 commercial gins. 4/ By 1954-55, very nearly one-third of all active gins were so equipped (table 15). Their use was greatest in the West, where about 9 out of 10 gins operated these cleaners. In other regions, proportions of gins with lint cleaners ranged from about one-fourth in the Southeast to slightly less than one-third in the Southwest. This distribution in a very general way followed the pattern of use of mechanical methods of harvesting. By States, gins having lint cleaners ranged from 12 percent of those in Tennessee to 96 percent in California.

In 1954-55, slightly more than half the crop was lint-cleaned by the slightly less than one-third of the gins with such cleaners. Excluding the West, where practically all gins have lint cleaners, gins with these cleaners had volumes as a group which were considerably above average for their locations.

A surprising and somewhat disturbing fact was that 94 percent of the cotton received at lint cleaner-equipped gins was passed through these cleaners. This average high rate of use was Belt-wide, ranging from 90 percent in the South Central region to 97 percent in the Southwest. Minimum State-wide use was in Arkansas, where ginners having such equipment lint-cleaned 84 percent of their volume. In 9 of the 14 larger cotton-growing States, ginners used their lint cleaners more than 95 percent of the time.

For the Belt as a whole, about 7 out of 10 ginners operating lint cleaners used this equipment on every bale (table 16). Only 11 percent of the ginners with lint cleaners used them on less than 80 percent of the cotton, and only 5 percent passed less than 60 percent of their bales through the cleaners. Ginners in the South Central and Southwestern regions showed slightly more selective use, but even there about 60 percent of ginners lint-cleaned all bales as against around 80 percent in the West and Southeast.

Some caution is in order concerning use of lint cleaners. This type of equipment was developed to go beyond the practical limits of existing seed

4/ Gerdes, Francis L., "Cotton Lint Cleaning at Gins--An Evaluation from the Standpoint of Cotton Quality and Economic Factors," U. S. Department of Agriculture, May 1951 (processed).

Table 15.—Extent to which gins were equipped with lint cleaners, proportions of the total crop passed through lint cleaners, and proportions of ginnings lint cleaned at gins equipped with lint cleaners, by specified major cotton States and regions, season 1954-55

State and region	Proportion of—		
	Active gins equipped with lint cleaners	Total ginnings passed through lint cleaners	Ginnings lint cleaned at gins equipped with lint cleaners
	Percent	Percent	Percent
Alabama	31.0	41.8	96.9
Georgia	20.8	32.6	97.6
North Carolina	16.9	28.8	97.5
South Carolina	26.4	36.3	91.9
Southeastern region 1/	24.6	35.8	96.0
Arkansas	29.7	40.2	84.3
Louisiana	21.8	39.0	89.9
Mississippi	32.5	45.1	91.4
Missouri	62.5	51.3	95.6
Tennessee	12.5	18.3	95.7
South Central region 2/	29.4	40.2	90.0
Oklahoma	17.0	35.8	97.6
Texas	35.1	55.0	97.2
Southwestern region	32.5	53.7	97.3
Arizona	94.4	89.4	96.8
California	96.3	92.3	93.6
New Mexico	53.8	57.7	99.9
Western region	89.4	87.6	95.1
United States	32.2	53.0	94.4

1/ Includes Florida and Virginia.
2/ Includes Illinois and Kentucky.

cotton cleaning in removing additional leaf and other trash particles often present in machine-harvested cotton. Lint cleaners have played an important role in helping growers realize the full value of crops gathered mechanically or in a relatively rough manner by hand. Lint cleaning, however, in some cases reduces net returns to growers. Cotton which is Middling or better before lint cleaning usually is not improved enough in grade value by such cleaning to offset the resulting loss in bale weight. Also, growers not uncommonly have to pay an added charge or higher rate for having the cotton lint-cleaned.

Table 16.--Proportionate distribution of lint cleaner-equipped gins according to specified proportions of ginnings lint-cleaned at such gins, by regions, season 1954-55

Proportion of ginnings lint cleaned	Proportion of lint cleaner-equipped gins in--				
	Southeastern region	South Central region	Southwestern region	Western region	United States
	Percent	Percent	Percent	Percent	Percent
Less than 40	--	3.2	1.2	--	1.3
40.0 to 59.9	1.3	8.7	--	4.1	3.6
60.0 to 79.9	6.6	8.7	4.6	4.1	6.2
80.0 to 99.9	9.2	20.7	33.3	12.2	20.1
100	82.9	58.7	60.9	79.6	68.8
Total	100.0	100.0	100.0	100.0	100.0

Ginners operating lint cleaners in 1954-55 did receive about one-third less handpicked cotton, proportionately, than did ginners not having such cleaners (table 17). Most machine-picked cotton was taken to lint cleaner-equipped gins, the proportion of such cotton handled by lint-cleaner gins being about eight times greater than at gins without these cleaners. This decided preference of growers with machine-picked cotton for using gins with lint cleaning facilities was Belt-wide. On the other hand, most ginners having lint cleaners did receive important volumes of handpicked cotton and therefore had to exercise care and judgment in the selective use of the cleaners in protecting the best interests of their customers.

In all except the Western region, ginners seldom make a separate added charge for lint cleaning. In California and Arizona, where most gins have lint cleaners, most of the gins made a separate charge for this service of about $1.50 per bale in 1954-55.

Although most ginners in Arizona and California had their schedules of charges arranged so that they got important revenue from running cotton through lint cleaners, this situation apparently had no real bearing on rate of use of the cleaners. Actually, in both States in 1954-55, ginners making separate

added charges used their cleaners less than did ginners who provided lint cleaning at no extra charge. In both cases, however, charges for ginning presumably were increased by the high rates at which the service was provided. The major fact is that ginners everywhere should give more thought and attention to determining when cotton should be bypassed around such equipment.

Table 17.--Proportions of cotton received at gins with and without lint cleaners which were harvested by specified methods, by regions, season 1954-55

Region and type of gin	Method of harvest				
	Hand-picking	Machine picking	Hand-snapping	Machine stripping	Total
	Percent	Percent	Percent	Percent	Percent
Southeast gins:					
With lint cleaners	89.5	6.6	3.8	0.1	100.0
Without lint cleaners	98.3	.8	.9	1/	100.0
South Central gins:					
With lint cleaners	61.1	25.4	13.4	.1	100.0
Without lint cleaners	82.2	5.4	12.3	.1	100.0
Southwest gins:					
With lint cleaners	21.0	3.0	54.0	22.0	100.0
Without lint cleaners	16.4	1.7	68.2	13.7	100.0
Western gins:					
With lint cleaners	39.6	53.9	6.3	.2	100.0
Without lint cleaners	78.9	6.6	14.1	.4	100.0
United States gins:					
With lint cleaners	45.3	25.8	22.2	6.7	100.0
Without lint cleaners	65.6	3.2	26.9	4.3	100.0

1/ Less than 0.05 percent.

Ginning Preparation

The real cost to growers for ginning depends not only upon the charge paid but also upon the quality of service received. Upon occasion, differences in the quality of ginning performance between areas have been compared on the basis of relative amounts of cotton reduced in grade because of ginning preparation.

A most gratifying development has been the substantial decrease in recent years in the proportions of roughly ginned cotton in all parts of the Belt. During the 14-year period 1933-46, approximately 7 percent of ginnings suffered a reduction in grade because of ginning preparation (table 18). In the 8-year period 1947-54, only about 2 percent of the crop was roughly ginned, on the average. During both periods, however, relative amount of rough-ginned cotton by regions were progressively greater from east to west across the Belt.

Table 18.--Ginning charges and percentages of rough-ginned cotton, by regions--14-year period 1933-46 and 8-year period 1947-54

Region	14-year period 1933-46 --		8-year period 1947-54 --	
	Average charge for ginning services per 500-pound gross-weight bale	Average percent of rough-ginned cotton	Average charge for ginning services per 500-pound gross-weight bale	Average percent of rough-ginned cotton
	Dollars	Percent	Dollars	Percent
Southeast	3.97	10.8	8.63	4.0
South Central	5.72	6.3	11.15	2.0
Southwestern	6.46	4.5	13.12	.8
Western	5.63	2.9	11.69	.7
United States	5.45	6.8	11.36	1.8

In the earlier period, approximately 11 percent of the Southeastern crop was reduced in grade on account of preparation, as compared with approximately 3 percent in the Western region. During the latter period, 4 percent of the cotton in the Southeast was roughly ginned, a proportion about 6 times greater than the 0.7 percent found in the West.

In spite of this very marked reduction in the proportion of roughly ginned cotton originating from all four regions of the Belt, the fact remains that the lower ginning charges prevailing particularly in the Southeast and to a lesser extent in the South Central region are offset somewhat by the poorer quality of service. Admittedly, climatic conditions affecting ginning preparation are more adverse in these regions than in the less humid Southwest and West, but on the other hand, these latter two regions receive more roughly harvested cotton.

Regardless of differences in regional problems in the nature and condition of cotton as received, the average gin in the Southeast in the past 8 years received about one-seventh as much volume and about one-eleventh as much gross ginning income as the typical Western gin. Presumably, this combination has had an adverse effect upon the ability of many ginners to install and maintain equipment necessary to cope with the operating problems peculiar to the area.

Materials Used for Covering Bales

Charges for ginning cotton as discussed in this report include charges for the packaging materials. Charges for bagging and ties form an important item of ginning cost to growers in most States, but at some gins in the Southeast, the use of secondhand wrapping materials results in a lower charge than elsewhere.

During the 8-year period 1947-48 to 1954-55, charges paid for bagging and ties by all growers in the United States averaged $3.37 per bale (table 19). Thus, the total annual cost to farmers for such materials during this period averaged about 46 million dollars and represented about 30 percent of the total cost to growers for ginning services.

By regions, average charges for bagging and ties ranged from $2.83 in the Southeast to $3.55 in the South Central States. The lowest charge was assessed in Virginia and the highest charge was made in Missouri, averaging $2.35 and $4.29 per 500-pound bale, respectively. Charges in the Southeast were from 49 to 72 cents per bale less than in the other regions, partly because of the fact that sizable proportions of the crop normally are wrapped with reworked or secondhand bagging. In the Southwestern and Western regions, average charges for bagging and ties during the period were $3.53 and $3.32 per bale, respectively.

Variations in charges for bale coverings made by ginners are influenced by a wide variety of circumstances. These include differences in type and quality of materials, in transportation costs, and in the customs followed in setting charges for bagging and ties as compared to those for the ginning operation.

For decades, open-weave jute bagging has been the most popular bale covering, and nearly all of the remainder of bales were wrapped in sugar-bag cloth. In 1954-55, open-weave jute was used on about three-fifths of the crop, the more extensive use being made in Arizona, Arkansas, California, Mississippi, Missouri, Oklahoma, South Carolina, and Tennessee (table 20). Two-fifths of the crop was wrapped with sugar-bag cloth, the major proportion of ginnings in the Southeast and Southwest being covered with this material. All other types of bale coverings, including cotton bagging, burlap, and certain experimental materials, together accounted for only 0.2 percent of the crop. Use of sugar-bag cloth has expanded considerably in recent years, increasing from 29 percent of all bales in 1946-47 to 40 percent in 1954-55. Most of the relatively small but important crop of American-Egyptian cotton is wrapped with sugar-bag cloth.

All branches of the cotton industry long have recognized the need for improving the protective features, appearance, and tare of the conventional gin bale. Recently the cotton industry and a number of manufacturers of bale covering materials have been experimenting with a wide variety of substitute coverings, including nonwoven fabrics, treated paper, burlap, and plastics. Numerous ginners have cooperated in placing experimental coverings on bales. Although no final reports have been made, several new types of covers seem to offer considerable promise.

Table 19.--Total charges for ginning services per 500-pound gross-weight bale, charges for bagging and ties, and proportion of total ginning charges represented by charges for bagging and ties, by States and regions, 8-year averages, seasons 1947-48 to 1954-55

State and region	Total charge for ginning and wrapping a 500-pound gross-weight bale	Charge per bale for bagging and ties	Proportion of total charge for ginning represented by charge for bagging and ties
	Dollars	Dollars	Percent
Alabama	8.05	2.70	33.5
Florida	9.71	2.94	30.3
Georgia	8.81	2.91	33.0
North Carolina	9.27	2.93	31.6
South Carolina	8.77	2.87	32.7
Virginia	8.18	2.35	28.7
Southeastern region	8.63	2.83	32.8
Arkansas	12.04	3.48	28.9
Louisiana	10.68	3.45	32.3
Mississippi	10.09	3.51	34.8
Missouri	15.55	4.29	27.6
Tennessee	9.69	3.51	36.2
South central region	11.15	3.55	31.8
Oklahoma	13.85	3.37	24.3
Texas	13.05	3.54	27.1
Southwestern region	13.12	3.53	26.9
Arizona	11.53	3.35	29.1
California	11.66	3.27	28.0
New Mexico	12.33	3.57	29.0
Western region	11.69	3.32	28.4
United States	11.36	3.37	29.7

Table 20.--Relative importance of specified types of bagging used at gins for covering cotton bales, by States and regions season 1954-55 1/

State and region	Type of bagging used				All types
	Open-weave jute	Sugar bag cloth	Cotton	Other 2/	
	Percent	Percent	Percent	Percent	Percent
Alabama	24.3	75.3	3/	0.4	100.0
Florida	5.3	94.7	--	--	100.0
Georgia	47.1	52.3	3/	0.6	100.0
North Carolina	46.1	50.7	0.8	2.4	100.0
South Carolina	65.5	34.3	--	0.2	100.0
Virginia	3.3	89.4	5.5	1.8	100.0
Southeastern region	43.2	55.8	0.2	0.8	100.0
Arkansas	94.8	5.2	--	--	100.0
Louisiana	35.7	63.8	0.3	0.2	100.0
Mississippi	79.1	20.6	0.2	0.1	100.0
Missouri	90.4	9.1	0.5	--	100.0
Tennessee	87.4	12.4	0.2	--	100.0
South Central region	80.6	19.2	0.2	3/	100.0
Oklahoma	96.9	3.1	3/	--	100.0
Texas	31.8	68.0	0.2	--	100.0
Southwestern region	36.4	63.4	0.2	--	100.0
Arizona	82.7	17.3	--	--	100.0
California	77.1	22.9	--	--	100.0
New Mexico	41.7	58.3	--	--	100.0
Western region	75.1	24.9	--	--	100.0
United States	59.7	40.0	0.1	0.2	100.0

1/ Preliminary.
2/ Includes burlap, plastics, and various other materials.
3/ Less than 0.05 percent.

Based on data obtained from the U. S. Bureau of the Census.

Transportation of Cotton from Farm to Gin

Many ginners, under certain competitive conditions, perform services which are not strictly a part of the ginning operation. Generally, seed cotton is transported from farms to gins by growers, but in some cases, ginners haul for growers and include hauling costs in the ginning rate. In most instances, however, separate charges are made when hauling is performed by ginners.

During the period 1947-48 to 1954-55, proportions of cotton hauled to gins by growers in the United States increased from about 83 percent in the earlier season to about 87 percent in 1954-55 (table 21). The remaining 17 to 13 percent of ginnings was hauled by ginners' trucks or by commercial truckers. For the Cotton Belt as a whole, only minor variations in proportions of cotton hauled by each of these agencies have occurred during the last 15 years.

Although the proportions of cotton hauled by farmers varied little between 1947-48 and 1954-55, the method of transportation changed significantly. In 1947-48, about 18 percent of the total crop was brought to gins by farmers using wagons and teams, but in 1954-55, only 3 percent was hauled by such means, which is further evidence of the trend toward mechanization of farming activities.

For a number of years, growers in the Western region almost exclusively have used their own motor vehicles in hauling cotton to the gin. In 1947-48, minute proportions of the Western crop were hauled by commercial truckers, but in 1954-55, the small amount transported by means other than growers' vehicles was moved in trucks owned by ginners.

Growers in the Southeastern region made most extensive use of ginners' trucks, but even there the practice declined appreciably from 1947-48 to 1954-55. In earlier years, ginners hauled as much as one-fourth of the Southeastern crop, but by 1947-48 that proportion decreased to about 17 percent and by 1954-55 it had declined to slightly more than one-tenth of the Southeastern crop.

Most of the hauling performed by ginners was done on a fee basis, but in some cases the service was included as a part of the regular ginning charge. In the Southeast, separate charges were levied on about 97 percent of the cotton hauled by ginners in both the 1947-48 and 1954-55 seasons. During the 8-year period, average charges in the Southeast increased from $1.55 per bale in 1947-48 to $1.68 per bale in 1954-55.

The use of commercial truckers by growers was confined largely to the Southwestern region, and there mainly in Texas. During the period 1947-48 to 1954-55, from one-fourth to one-third of the Southwestern crop was hauled to gins by commercial truckers. Average charges for commercial hauling in the Southwest increased from $4.91 per bale in 1947-48 to $5.36 per bale in 1954-55. In each season, commercial truckers were used to a limited extent by growers in both the Southeast and South Central regions.

Table 21.--Proportions of cotton hauled to gins by farmers, ginners, and commercial truckers, by States and regions, seasons 1954-55 and 1947-48

State and region	1954-55						1947-48					
	Cotton hauled to gin by--						Cotton hauled to gin by--					
	Farmers			Ginners' trucks	Commercial truckers	Total	Farmers			Ginners' trucks	Commercial truckers	Total
	Wagons	Motor vehicles	Total				Wagons	Motor vehicles	Total			
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Alabama	6.5	88.6	95.1	3.0	1.9	100.0	31.7	49.5	81.2	6.5	12.3	100.0
Florida	1.8	98.2	100.0	--	--	100.0	11.5	88.5	100.0	--	--	100.0
Georgia	3.8	81.7	85.5	12.1	2.4	100.0	24.1	52.6	76.7	18.9	4.4	100.0
North Carolina	5.3	75.9	81.2	15.4	3.4	100.0	24.1	47.5	71.6	26.2	2.2	100.0
South Carolina	5.0	75.0	80.0	17.0	3.0	100.0	23.5	50.4	73.9	23.0	3.1	100.0
Virginia	5.6	86.9	92.5	5.6	1.9	100.0	18.5	60.6	79.1	20.9	--	100.0
Southeastern region	5.2	81.6	86.8	10.7	2.5	100.0	26.5	50.2	76.7	16.9	6.4	100.0
Arkansas	3.4	92.8	96.2	3.0	.8	100.0	31.9	65.5	97.4	.5	2.1	100.0
Louisiana	10.6	81.7	92.3	1.1	6.6	100.0	37.5	52.3	89.8	5.2	5.0	100.0
Mississippi	6.8	91.3	98.1	.9	1.0	100.0	29.2	59.4	88.6	5.6	5.8	100.0
Missouri	.7	83.5	84.2	--	15.8	100.0	13.6	82.4	96.0	--	4.0	100.0
Tennessee	13.3	86.5	99.8	.1	.1	100.0	45.5	53.1	98.6	.5	.9	100.0
South Central region	6.4	89.2	95.6	1.4	3.0	100.0	31.8	61.4	93.2	2.9	3.9	100.0
Oklahoma	.1	92.8	92.9	--	7.1	100.0	10.6	85.5	96.1	--	3.9	100.0
Texas	.2	67.8	68.0	--	32.0	100.0	2.8	64.9	67.7	.1	32.2	100.0
Southwestern region	.2	69.6	69.8	--	30.2	100.0	3.5	66.7	70.2	.1	29.7	100.0
Arizona	1.2	98.4	99.6	.4	--	100.0	--	100.0	100.0	--	--	100.0
California	--	95.5	95.5	4.5	--	100.0	.2	99.7	99.9	--	.1	100.0
New Mexico	--	100.0	100.0	--	--	100.0	.6	98.8	99.4	--	.6	100.0
Western region	.4	96.9	97.3	2.7	--	100.0	.3	99.5	99.8	--	.2	100.0
United States	3.1	83.5	86.6	2.8	10.6	100.0	18.5	64.4	82.9	4.9	12.2	100.0

Related Business Activities of Ginners

Frequently, ginners engage in other business activities. In many areas, ginners purchase most of the cotton they gin, and in all areas they customarily buy all cottonseed except that saved by growers for planting or other farm use. Thus, an exact appraisal of actual cost to growers for ginning services is tied in with prices paid growers by ginners for cotton and cottonseed, as well as costs of supplies or services obtained from ginners.

Sideline businesses such as gristmills, feed-grinding mills, and, in some instances, sawmills often are conducted by ginners on the gin premises. In many cases, the ginning activity is supplemented by sale of planting seed, fertilizers, insecticides, stock feeds, and various other items needed by farmers.

Also, in some instances, gins are operated by owners whose main business interest lies in some other established but related enterprise, such as cottonseed crushing, production credit, cotton marketing, or warehousing. Frequently, in this regard, policies concerning charges for ginning are influenced somewhat by the overall situation.

Purchases of Cotton by Ginners

For the Cotton Belt as a whole, ginners bought one-third of the cotton they ginned in 1947-48 as compared with 27 percent of the crop in 1954-55 (table 22). By regions in 1954-55, proportions of ginnings purchased from growers ranged from 2 percent in the West to about 46 percent in the Southeast. In most fringe States of the Cotton Belt, ginners in 1947-48 and 1954-55 bought the major portion of the cotton received.

Ginners usually bought cotton as baled lint, but about 1 or 2 percent of purchases in the United States from 1947-48 to 1954-55 were in the form of seed cotton. Ginners in Virginia purchased considerable cotton from farmers as seed cotton in each season. In 1954-55, such transactions represented almost three-fifths of the Virginia crop as compared with about 43 percent in 1947-48. Elsewhere purchases of seed cotton by ginners consisted almost entirely of remnants.

Normally, ginners in the Western region purchase relatively small proportions of cotton from growers, as compared with other regions of the Cotton Belt. Ginners in Missouri and Tennessee bought more than 70 percent of the cotton received in both 1947-48 and 1954-55; but in Mississippi, proportions of cotton sold to ginners by growers have always been minor.

For the last 20 years, proportions of the crop purchased by ginners have been influenced to a large extent by the volume of cotton marketed by growers through Government loan programs. For example, in 1948-49, more than one-third of the U. S. crop was placed in the loan, and ginners actually purchased almost 36 percent of the "free" cotton, as compared with about 23 percent of the total crop (table 23). In 1950-51, only a very small proportion of cotton entered the loan, and the actual proportion of free cotton purchased by ginners was smaller than for the 1948-49 season.

Table 22.--Proportions of cotton purchased by ginners, by States and regions, seasons 1954-55 and 1947-48

State and region	Purchases of seed cotton by ginners 1/		Purchases of baled lint by ginners		Total cotton purchases by ginners	
	1954-55	1947-48	1954-55	1947-48	1954-55	1947-48
	Percent of ginnings	Percent of ginnings	Percent of ginnings	Percent of ginnings	Percent of ginnings	Percent of ginnings
Alabama	1.0	1.0	44.3	37.2	45.3	38.2
Florida	2.9	17.1	95.9	79.9	98.8	97.0
Georgia	0.6	0.4	44.0	31.5	44.6	31.9
North Carolina	6.8	4.3	42.7	39.8	49.5	44.1
South Carolina	0.2	0.2	44.1	26.3	44.3	26.5
Virginia	57.6	43.2	33.4	43.9	91.0	87.1
Southeastern region	1.9	1.5	44.3	33.8	46.2	35.3
Arkansas	0.8	0.7	31.5	27.2	32.3	27.9
Louisiana	0.4	0.6	27.0	19.9	27.4	20.5
Mississippi	0.3	0.2	4.8	1.3	5.1	1.5
Missouri	1.0	1.7	97.2	77.2	98.2	78.9
Tennessee	4.6	9.7	76.7	61.8	81.3	71.5
South Central region	1.1	1.8	33.8	24.9	34.9	26.7
Oklahoma	5.5	22.2	29.5	50.3	35.0	72.5
Texas	0.7	1.2	23.8	37.4	24.5	38.6
Southwestern region	1.0	3.0	24.2	38.6	25.2	41.6
Arizona	--	2/	2.7	--	2.7	2/
California	--	2/	--	38.8	--	38.8
New Mexico	--	0.1	9.8	5.6	9.8	5.7
Western region	--	2/	2.0	26.2	2.0	26.2
United States	1.0	1.9	26.3	31.4	27.3	33.3

1/ Bale remnants not reported in some instances.
2/ Less than 0.05 percent.

Table 23.--Proportion of cotton marketed by growers through Government loan program and by sale to ginners, seasons 1938-39 to 1954-55

Season	Proportion of production		Proportion of "free" cotton purchased by ginners	Proportion of total cotton purchased by ginners
	Placed in Government loan	Remaining as "free" cotton		
	Percent	Percent	Percent	Percent
1938-39	38.4	61.6	36.0	22.2
1939-40	.3	99.7	30.3	30.2
1940-41	25.9	74.1	37.4	27.7
1941-42	21.3	78.7	35.4	27.9
1942-43	25.4	74.6	31.5	23.5
1943-44	32.5	67.5	29.3	19.8
1944-45	17.9	82.1	22.0	18.1
1945-46	2.5	97.5	29.9	29.2
1946-47	1.7	98.3	32.9	32.4
1947-48	2.4	97.6	34.1	33.3
1948-49	36.2	63.8	35.7	22.8
1949-50	20.0	80.0	34.4	27.5
1950-51	.1	99.9	32.0	32.0
1951-52	7.4	92.6	30.9	28.6
1952-53	15.5	84.5	30.9	26.1
1953-54	42.0	58.0	32.6	18.9
1954-55	17.0	83.0	32.9	27.3
17-year average	19.2	80.8	32.2	26.0

Purchase of Cottonseed by Ginners

Cottonseed production in the United States averaged about 5 1/4 million tons per season during the 10-year period 1944-45 to 1953-54. From 86 to 92 percent of seed in each season was marketed for crushing purposes. Cottonseed is customarily sold by growers to ginners at time of ginning, except for small amounts saved for planting or other farm use. In the settlement of seed transactions, weights are determined at gins either by weighing or by various methods of estimation.

Information regarding the different methods followed in determining purchase weights of cottonseed at gins has been collected periodically since 1944-45. During this period, some significant changes have been developing gradually. The general trend has been toward use of seed scales by ginners in determining cottonseed purchase weights (table 24). In 1954-55, 45 percent of the cottonseed bought by ginners from growers in the United States was bought on scale weights as compared with 25 percent in 1944-45.

By regions, the swing toward use of seed scales was particularly noticeable in the Southeast and Southwest, where 77 and 81 percent, respectively, of seed purchased in the 1954-55 season was actually weighed at the gin, as

Table 24.--Proportions of cottonseed purchased by ginners from growers according to specified methods of determining cottonseed weights, by States and regions, seasons 1954-55 and 1944-45

State and region	Methods of determining cottonseed weights in specified seasons														Total each season
	Seed scales		Seed cotton load weight minus gross weight of bale		Seed cotton load weight minus gross weight of bale minus actual weight of trash, or a given number of pounds, or a percentage of seed cotton load weight		Estimated as a percentage of seed cotton load weight		Bale weight multiplied by seed-lint ratio		Other methods 1/				
	1954-55	1944-45	1954-55	1944-45	1954-55	1944-45	1954-55	1944-45	1954-55	1944-45	1954-55	1944-45			
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent			Percent
Alabama	61	8	34	84	5	4	--	--	--	3	--	1			100
Georgia	79	--	18	94	3	6	--	--	--	--	--	--			100
North Carolina	78	--	20	100	1	--	1	--	--	--	--	--			100
South Carolina	96	62	4	20	--	16	--	--	--	1	--	1			100
Southeastern region 2/	77	18	20	73	3	7	3/	1	--	1	--	3/			100
Arkansas	14	7	5	35	61	48	2	1	16	6	2	3			100
Louisiana	90	40	3	57	7	1	--	--	3/	--	--	2			100
Mississippi	28	2	58	53	6	42	--	--	8	3	--	--			100
Missouri	--	--	--	--	84	94	--	--	11	6	5	--			100
Tennessee	2	--	16	11	73	89	3/	--	5	--	4	--			100
South Central region 4/	25	8	24	39	39	48	1	3/	9	4	2	1			100
Oklahoma	94	51	--	1	--	--	6	48	--	--	--	--			100
Texas	80	66	3/	1	8	7	9	21	3	5	3/	3/			100
Southwestern region	81	63	3/	1	7	6	9	26	3	4	3/	3/			100
Arizona	--	--	--	--	99	65	--	--	1	35	--	--			100
California	--	--	--	--	17	85	--	--	83	15	--	--			100
New Mexico	17	--	--	--	73	91	--	--	10	9	--	--			100
Western region	2	--	--	--	45	81	--	--	53	19	--	--			100
United States	45	25	11	37	25	26	3	7	15	4	1	1			100

1/ Includes various minor methods of estimation, most of which were derived from bale weights; also includes, in a few instances, cottonseed purchased in the form of seed cotton.
2/ Includes Florida and Virginia.
3/ Less than 0.5 percent.
4/ Includes Illinois and Kentucky.

compared with 18 and 63 percent in 1944-45. The use of seed scales increased significantly in all States of these two regions. In all South Central States except Louisiana, seed scales were used to a minor extent. In the West, no use of seed scales was reported in Arizona or California in either season.

Although use of seed scales has steadily increased over most of the Cotton Belt, most of the cottonseed sold by growers to ginners in 1954-55, as in past seasons, was purchased on weights estimated by one or more methods, depending upon local custom. About 36 percent of seed in 1954-55 was purchased by ginners on weights estimated by weighing loads of seed cotton and either deducting gross weights of bales or deducting bale weights and additional amounts to compensate for trash. Such methods were used for 63 percent of the cottonseed purchased in the South Central region in 1954-55 compared with about 87 percent in 1944-45. Also in 1944-45, four-fifths of the seed in the Southeast was bought on such estimates, as compared with only one-fifth in 1954-55.

Weights for about 15 percent of the cottonseed purchased by ginners in the United States in 1954-55 were estimated by multiplying the bale weights by seed-lint ratio factors. This method was employed generally on snapped or mechanically harvested cotton in those areas where seed scales were less commonly used. More than half the seed purchased in the Western region in 1954-55 was bought on weights estimated in this manner, while most of the remaining seed transactions were based on seed cotton weights minus bale weights and established reductions for trash.

Several other methods of estimating seed weights were used in 1954-55, but most were relatively unimportant on a regional or Belt-wide scale. In past seasons, weights for a sizable proportion of seed in the Southwest were estimated as percentages of seed cotton load weights, but that practice appears to have largely given way to use of seed scales.

Other Services of Ginners

Numerous other services are performed by ginners in connection with ginning and marketing cotton. Some may be the result of competition, but on the whole, the ginner holds a very responsible position in the local market, and many of the services performed are voluntary contributions toward improving production and marketing practices.

In some States, ginners frequently haul baled lint from gins to nearby destinations such as local warehouses, compresses, or railroad platforms, as desired by growers. Often the distance is not great, and charges are seldom made for the service at gins where such hauling is routine. In addition to aiding the grower, this procedure also minimizes fire hazards associated with accumulations of cotton on gin yards. Also, the marketing process is facilitated in that baled lint is placed in warehouses or compresses very shortly after ginning.

Growers in most sections of the Cotton Belt have the privilege of storing baled cotton on gin yards until sold. Customarily, ginners make no charge

for this service, and in some cases free insurance is provided. A large proportion of the Western crop is stored on gin yards until sold by growers, but ginners in that area usually make a separate charge for the service. In such cases, total ginning revenue is increased considerably.

In 1954-55, ginners in both Arizona and California most commonly received $1 per bale for storage and insurance for the first 20 days and an additional amount, averaging about 14 cents per bale, for in-transit insurance from field to gin. In New Mexico, such related charges ranged from 30 cents per bale for insurance covering the first 30 days to $1.25 per bale to cover insurance and yardage for the entire time cotton was on the gin yard. However, in most cases the cotton moved within short periods of time.

Federal quarantine regulations regarding pink bollworm control require sterilization of cottonseed during ginning in areas of infestation. For a number of years these areas were confined to Arizona, New Mexico, and the extreme southern and western parts of Texas, but in recent seasons infestation has spread to parts of Arkansas and Louisiana.

In 1954-55, ginners subject to the regulation in Arizona usually made a separate charge for sterilization, averaging about 45 cents per bale. Most New Mexico ginners made no separate charge for the service. More than two-fifths of the Texas crop was under quarantine and ginners sterilized about 60 percent of the seed at an average additional cost to growers of about 69 cents per bale. Only small proportions of the Arkansas and Louisiana crops required sterilization, and in most cases growers in the respective States paid $1.22 and $1.24 per bale, on the average, for the service when performed.

Ginners have been of much assistance to growers in cotton improvement programs, frequently supplying farmers with the latest information relating to cotton varieties. Some ginners keep account of the seed being used by their customers and offer to supply new and improved seed as it becomes necessary and available.

Growers who were members of cotton improvement groups in 1954-55 received free classification on more than 10 million bales of cotton, or almost three-fourths of the entire crop. Much of this cotton was sampled for such classing free of charge, by ginners who were bonded to perform the sampling service. Many ginners also perform numerous other services in connection with various agricultural programs, one of the more important being the preparation of necessary documents for growers wanting to market their cotton through Government loan programs. Most of these services are provided free to customers.

Various miscellaneous services performed by some ginners free of charge to their customers include such practices as lending trucks and trailers for use in hauling cotton to the gin, insuring seed cotton and hauling vehicles while on the gin yard, hauling back to farms seed saved by growers for planting, helping farmers locate labor for the harvest, making available for use spraying and dusting machines, and assisting farmers in marketing their cotton.

Table 25.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1947-48 1/

State	System of assessing charges																Separate charge per pattern for bagging and ties
	Ginning charges including bagging and ties								Ginning charges not including bagging and ties								
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale		Per cwt. seed cotton		Per cwt. lint						
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped					
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.					Dol.
Alabama	7.02	3/	3/	3/	1.52	--	4.50	--	0.40	3/	0.96	3/					2.11
Arizona	--	--	--	--	--	--	--	--	.43	0.50	--	--					2.37
Arkansas	7.00	7.90	--	--	1.50	3/	3/	3/	.47	.56	3/	3/					2.71
California	--	--	--	--	--	--	--	--	.40	.45	--	--					2.43
Florida	7.50	--	--	--	--	--	--	--	--	--	1.00	--					2.00
Georgia	6.54	3/	--	--	1.49	--	5.00	--	.35	3/	.91	3/					2.29
Louisiana	--	--	--	--	--	--	--	--	.39	--	1.11	--					2.82
Mississippi	6.94	3/	--	--	1.42	3/	--	--	.43	.48	.97	3/					2.82
Missouri	--	--	--	--	--	--	--	--	.51	.68	--	--					3.42
New Mexico	--	--	--	--	--	--	--	--	.45	.51	--	--					2.56
North Carolina	7.44	3/	3/	--	1.39	3/	5.00	3/	.38	--	1.00	3/					2.24
Oklahoma	--	--	--	--	--	--	--	--	.45	.50	--	--					2.60
South Carolina	6.50	--	--	--	1.40	3/	3/	3/	.40	--	.95	3/					2.16
Tennessee	7.31	10.10	--	--	1.60	3/	8.00	--	.40	.41	--	--					2.72
Texas	--	--	.76	3/	--	--	--	--	.46	.49	1.16	1.56					2.83
Virginia	7.00	--	--	--	--	--	--	--	.32	--	--	--					2.00
United States	7.10	9.28	.65	3/	1.46	3/	5.65	3/	.44	.50	.99	1.53					2.67

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 26.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1948-49 1/

State	System of assessing charges												
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale	Per cwt. seed cotton		Per cwt. lint			
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped		
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.		Dol.
Alabama	7.26	9.58	--	--	1.42	--	5.08	0.35	--	0.99	--		2.27
Arizona	--	--	--	--	--	--	--	.41	0.47	--	--		3.02
Arkansas	7.29	9.93	--	--	1.60	--	3/	.50	.57	3/	3/		3.24
California	--	--	--	--	--	--	--	.40	.45	--	--		3.00
Florida	6.55	--	--	--	3/	--	--	--	--	1.00	--		3.00
Georgia	6.97	--	--	--	1.58	--	3/	.37	3/	.96	3/		2.73
Louisiana	--	--	--	--	--	--	--	.44	--	1.20	--		3.13
Mississippi	7.18	3/	--	--	1.54	3/	--	.47	.50	.94	3/		3.29
Missouri	--	--	--	--	--	--	--	.57	.73	--	--		3.90
New Mexico	--	--	--	--	--	--	--	.51	.68	--	--		3.00
North Carolina	7.75	3/	3/	--	1.50	3/	5.00	.42	.45	1.09	3/		2.66
Oklahoma	--	--	--	--	--	--	--	.45	.50	--	--		3.10
South Carolina	6.86	3/	--	--	1.50	--	3/	.43	3/	1.09	3/		2.70
Tennessee	8.05	9.85	--	--	1.60	--	--	.41	.42	--	--		3.14
Texas	--	--	.83	3/	--	--	--	.49	.49	1.23	1.64		3.05
Virginia	8.00	--	--	--	--	--	--	--	--	--	--		--
United States	7.47	9.49	.72	3/	1.53	3/	5.18	.47	.51	1.07	1.69		3.09

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 27.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1949-50 1/

State	System of assessing charges												
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale	Per cwt. seed cotton		Per cwt. lint			
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped		
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.		Dol.
Alabama	6.99	9.27	--	--	1.69	--	5.04	0.38	3/	0.99	3/		2.48
Arizona	--	--	--	--	--	--	--	.42	0.48	--	--		3.27
Arkansas	7.37	8.88	--	--	1.63	3/	--	.50	.57	3/	3/		3.36
California	--	--	--	--	--	--	--	.40	.44	--	--		3.25
Florida	7.36	--	--	--	--	--	--	--	--	1.00	--		3.00
Georgia	7.67	--	--	--	1.57	3/	--	.39	3/	.96	3/		2.90
Louisiana	--	--	--	--	--	--	3/	.49	.62	1.14	3/		3.23
Mississippi	7.27	3/	--	--	1.68	3/	4.54	.48	.57	1.00	3/		3.44
Missouri	--	--	--	--	--	--	--	.59	.73	--	--		4.04
New Mexico	--	--	--	--	--	--	--	.47	.58	--	--		3.48
North Carolina	7.73	3/	--	--	2.07	3/	5.00	.42	--	1.04	3/		2.74
Oklahoma	--	--	--	--	--	--	--	.50	.51	--	--		3.40
South Carolina	7.14	--	--	--	--	--	--	.42	--	1.02	3/		2.82
Tennessee	8.01	9.26	--	--	1.75	--	--	.40	.44	--	--		3.41
Texas	--	--	0.78	3/	--	--	--	.50	.51	1.20	1.74		3.55
Virginia	8.00	--	--	--	--	--	--	.35	--	--	--		2.50
United States	7.42	9.19	.78	3/	1.68	3/	4.88	.47	.51	1.05	1.71		3.38

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 28.—Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1950-51 1/

State	System of assessing charges												
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale	Per cwt. seed cotton		Per cwt. lint			
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped		
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.		Dol.
Alabama	7.80	11.10	--	--	1.62	--	5.45	0.45	--	1.09	--		2.66
Arizona	--	--	--	--	--	--	--	.44	0.49	--	--		3.29
Arkansas	8.00	11.00	--	--	1.78	3/	--	.60	.70	3/	3/		3.54
California	--	--	--	--	--	--	--	.40	.44	--	--		3.25
Florida	8.51	--	--	--	--	--	--	--	--	1.20	--		3.00
Georgia	8.33	--	--	--	1.92	3/	6.00	.45	3/	1.13	3/		2.88
Louisiana	--	--	--	--	--	--	--	.49	--	1.46	--		3.37
Mississippi	7.87	3/	--	--	1.79	3/	--	.53	.59	1.13	3/		3.51
Missouri	--	--	--	--	--	--	--	.74	.87	--	--		4.39
New Mexico	--	--	--	--	--	--	--	.49	.62	--	--		3.51
North Carolina	8.72	3/	3/	--	1.67	3/	3/	.54	3/	1.15	3/		2.99
Oklahoma	--	--	--	--	--	--	--	.50	.50	--	--		3.39
South Carolina	7.11	--	--	--	--	--	--	.50	--	1.24	3/		2.83
Tennessee	8.69	10.32	--	--	2.00	2.15	--	.56	.55	--	--		3.65
Texas	--	--	0.79	3/	--	--	--	.51	.52	1.38	1.91		3.63
Virginia	7.35	--	--	--	--	--	--	.35	--	--	--		2.50
United States	8.08	10.86	.78	3/	1.86	2.09	5.62	.51	.54	1.27	1.89		3.45

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 29.—Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1951-52 1/

State	System of assessing charges														
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale		Per cwt. seed cotton		Per cwt. lint		
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Alabama	8.18	10.43	--	--	1.83	3/	--	--	0.40	3/	1.06	1.20	3.07
Arizona	--	--	--	--	--	--	--	--	.43	0.49	--	--	3.44
Arkansas	8.57	11.34	--	--	1.88	--	--	--	.63	.69	3/	3/	3.73
California	--	--	.90	.90	--	--	--	--	.42	.48	--	--	3.45
Florida	10.00	10.00	--	--	--	--	--	--	--	--	1.40	--	3.00
Georgia	10.61	11.07	--	--	2.04	2.02	7.65	3/	.46	.49	1.19	1.70	3.12
Louisiana	--	--	--	--	--	--	--	--	.57	.65	1.50	1.51	3.63
Mississippi	9.22	3/	--	--	1.59	3/	--	--	.55	.57	1.11	3/	3.72
Missouri	--	--	--	--	--	--	--	--	.75	.91	--	--	4.51
New Mexico	--	--	--	--	--	--	--	--	.57	.70	--	--	3.88
North Carolina	9.37	--	3/	--	1.72	3/	6.26	--	.56	3/	1.30	3/	3.26
Oklahoma	--	--	--	--	--	--	--	--	.61	.60	--	--	3.75
South Carolina	8.46	--	--	--	--	--	--	--	.53	3/	1.26	3/	3.16
Tennessee	9.01	10.73	--	--	2.00	2.00	--	--	.58	.53	--	--	3.72
Texas	--	--	3/	3/	--	--	--	--	.56	.54	1.39	1.72	3.78
Virginia	8.68	--	--	--	--	--	--	--	--	--	--	--	--
United States	8.77	10.58	.90	.87	1.96	1.97	7.21	3/	.53	.56	1.29	1.65	3.62

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 30.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1952-53 1/

State	System of assessing charges													
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale	Per cwt. seed cotton		Per cwt. lint			
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped:		
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.		Dol.
Alabama	8.47	11.12	--	--	1.87	--	5.48	.40	--	1.31	1.98		3.14
Arizona	--	--	--	--	--	--	--	.48	.58	--	--		3.66
Arkansas	9.03	3/	--	--	1.91	--	--	.67	.73	3/	3/		3.76
California	--	--	1.05	3/	--	--	--	.45	.57	--	--		3.50
Florida	10.75	13.84	--	--	--	--	--	--	--	1.40	3/		3.00
Georgia	9.45	11.54	--	--	2.08	2.14	--	.45	3/	1.22	1.67		3.17
Louisiana	3/	--	--	--	3/	--	--	.63	3/	1.64	1.62		3.83
Mississippi	8.27	3/	1.13	--	1.98	3/	--	.56	.68	1.02	3/		3.73
Missouri	--	--	--	--	--	--	--	.78	.90	--	--		4.65
New Mexico	--	--	--	--	--	--	--	.57	.67	--	--		3.88
North Carolina	10.14	3/	3/	--	1.74	3/	7.00	.58	3/	1.27	3/		3.21
Oklahoma	--	--	--	--	--	--	--	.55	.57	--	--		3.60
South Carolina	8.03	--	--	--	1.60	--	--	.53	--	1.27	--		3.10
Tennessee	9.04	11.11	--	--	2.00	2.00	--	.60	.57	--	--		3.68
Texas	--	--	3/	3/	3/	--	--	.61	.57	1.51	2.03		3.85
Virginia	8.33	--	--	--	--	--	--	--	--	--	--		--
United States	8.80	11.23	1.05	3/	2.00	2.07	5.62	.57	.59	1.36	1.93		3.70

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 31.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1953-54 1/

State	System of assessing charges														
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties								Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale		Per cwt. seed cotton		Per cwt. lint				
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and Stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped			
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.			Dol.
Alabama	8.38	11.43	--	--	2.10	3/	5.32	--	0.39	3/	1.31	1.93			3.04
Arizona	--	--	1.07	1.10	--	--	--	--	.52	0.57	--	--			3.40
Arkansas	9.11	3/	--	--	1.67	--	--	--	.67	.71	--	--			3.80
California	--	--	1.07	3/	--	--	--	--	.45	.53	--	--			3.38
Florida	10.58	13.09	--	--	--	--	--	--	--	--	1.40	2.00			3.00
Georgia	9.37	11.47	--	--	2.05	2.15	7.65	7.65	.45	.48	1.25	1.71			3.04
Louisiana	--	--	--	--	--	--	--	--	.64	.65	1.68	1.67			3.65
Mississippi	8.80	3/	--	--	1.91	3/	--	--	.58	3/	.99	3/			3.74
Missouri	--	--	--	--	--	--	--	--	.80	.93	--	--			4.68
New Mexico	--	--	--	--	--	--	--	--	.60	.62	--	--			3.87
North Carolina	9.86	3/	--	--	1.87	3/	--	--	.58	.70	1.33	3/			3.19
Oklahoma	--	--	--	--	--	--	--	--	.62	.60	--	--			3.50
South Carolina	8.26	--	--	--	1.98	--	--	--	.53	3/	1.34	3/			3.08
Tennessee	9.17	11.09	--	--	2.00	--	--	--	.62	.62	--	--			3.85
Texas	--	--	3/	3/	3/	--	--	--	.58	.55	1.55	2.00			3.73
Virginia	9.13	--	--	--	--	--	--	--	--	--	--	--			--
United States	8.77	11.34	1.07	1.01	1.99	2.15	5.57	7.65	.58	.56	1.41	1.94			3.64

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

Table 32.--Estimated average charges for ginning upland cotton under specified systems of assessing charges, by States, season 1954-55 1/

State	System of assessing charges														
	Ginning charges including bagging and ties						Ginning charges not including bagging and ties						Separate charge per pattern for bagging and ties
	Per bale		Per cwt. seed cotton		Per cwt. lint		Per bale		Per cwt. seed cotton		Per cwt. lint		
	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	Picked cotton 2/	Snapped and stripped	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Alabama	8.44	11.34	--	--	1.95	--	5.95	7.70	.50	--	1.26	1.92	3.01
Arizona	--	--	.90	3/	--	--	--	--	.49	.59	--	--	3.33
Arkansas	3/	10.50	--	--	2.00	3/	--	--	.69	.67	--	3/	3.78
California	--	--	1.04	1.08	--	--	--	--	.47	.58	--	--	3.27
Florida	10.64	13.86	--	--	--	--	--	--	--	--	1.41	3/	3.00
Georgia	10.08	11.27	--	--	2.05	3/	--	--	.44	3/	1.28	3/	3.00
Louisiana	--	--	--	--	--	--	--	--	.65	.69	1.76	1.62	3.70
Mississippi	9.55	3/	3/	3/	1.60	3/	--	--	.58	.61	1.26	3/	3.76
Missouri	--	15.50	--	--	--	--	--	--	.79	.90	--	--	4.66
New Mexico	--	--	--	--	--	--	--	--	.59	.62	--	--	3.76
North Carolina	9.87	--	--	--	1.91	--	--	--	.60	3/	1.42	3/	3.23
Oklahoma	--	--	--	--	--	--	--	--	.60	.60	--	--	3.50
South Carolina	8.00	--	--	--	1.60	--	--	--	.53	3/	1.33	3/	3.04
Tennessee	8.67	10.01	--	--	3/	--	--	3/	.64	.60	--	--	3.86
Texas	3/	--	3/	3/	3/	--	--	--	.62	.55	1.50	1.97	3.74
Virginia	10.00	--	--	--	--	--	--	--	.50	--	--	--	2.55
United States	8.86	10.89	1.03	.99	1.96	3/	5.95	8.81	.59	.57	1.43	1.79	3.62

1/ Rates are exclusive of any separate charges for drying or lint cleaning.
2/ Includes handpicked and machine picked.
3/ Represents less than 0.5 percent of total ginnings in State.

RATE CONVERSION FORMULAS

Formulas for conversion of charges for ginning and wrapping cotton, assessed by various systems, to a common base; that is, rate per 500-pound gross-weight bale

System of assessing charge	Formula
Per bale, including bagging and ties	$R = \frac{500\ r}{w}$
Per bale, not including bagging and ties	$R = \frac{500\ r}{w} + b$
Per hundredweight seed cotton, including bagging and ties	$R = r_1 N$
Per hundredweight seed cotton, not including bagging and ties	$R = r_1 N + b$
Per hundredweight lint cotton, including bagging and ties	$R = 5r_2$
Per hundredweight lint cotton, not including bagging and ties	$R = 5r_2 + b$

R = rate for ginning and wrapping per 500-pound gross-weight bale
r = rate per running bale
r_1 = rate per hundredweight seed cotton
r_2 = rate per hundredweight lint cotton
w = average weight of bales
b = separate charge for bagging and ties
N = number of hundredweight of seed cotton required for a 500-pound gross-weight bale

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